CCA: EXPLORATORY CASE STUDY OF CONSTRUCTION IN A CONTINGENCY ENVIRONMENT

THESIS

Michael J. Pluger, Captain, USAF

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DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY
AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

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Michael J. Pluger, BS

Captain, USAF

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Michael J. Pluger, BS

Captain, USAF

Approved:

Peter P. Feng, Maj, USAF (Chairman) — 3 March 10 — Date

Daniel T. Holt, Lt Col, USAF (Member) — 15 MARCH '10 — Date

Jason M. Turner, Lt Col, USAF (Member) — 10 Mar 10 — Date

Robert D. Fass, Lt Col, USAF (Member) — 3 Mar 10 — Date

Abstract

Top military leadership has identified problems with the timeliness and effectiveness of DoD contingency construction support. Qualitative data was collected in order to gain clarity on the problem space and lay a foundation for solution generation and selection. Interviews were conducted with agents with experience within the Iraq and Afghanistan theater of operation as well as support functions for the Pentagon. Commanders, Engineers, Lawyers, Acquisition Attorneys, Staff Officers and Program Managers have been interviewed. The interviews have been analyzed using open coding to answer research question and identify to emergent themes and concepts.

The data collected has revealed that Contingency Construction Authority is technically meeting its intent for projects programmed through CCA, but not for large-scale infrastructure that have circumvented the CCA process. Additionally, the CCA process is not meeting the expectation of the war fighters. Furthermore, because it is not meeting the war fighter's expectation the system is being manipulated in order to, "accomplish the mission" which is creating unintended adverse consequences with regard to cost, health, safety, force protection, Anti-Deficiency Act violations, mission support and safety. Significant negative consequences were found to be attributed to the interpretation of the term "temporary construction" and the time required to process CCA projects. To provide further insight and to assist with analysis, a value stream map was created in order to map the contingency construction approval and funding process. This research effort has provided clarity of the problem space of contingency construction and prepared a foundation for future research to address the problem.

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However, my most sincere thanks are reserved for my family; their support and devotion these many years have made all the effort and sacrifice worthwhile. Thanks to my father and mother for there unending support and encouragement. To my precious son, I hope he will understand why I didn't play with him as much as we both would have liked. Most of all, I thank my beloved wife for her sacrifice, love and encouragement throughout our marriage and more specifically during my studies at AFIT. To her I express my love, gratitude and appreciation.

Michael J. Pluger

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CCA: EXPLORATORY CASE STUDY OF CONSTRUCTION

IN A CONTINGENCY ENVIRONMENT

I. Introduction

Contingency construction is an operational necessity and often requires Military Construction (MILCON) level funding, particularly for large infrastructure projects. Contingency construction can be defined as unforeseen or unplanned construction requirements related to military operations such as combat, humanitarian assistance, or disaster relief efforts. This paper looks specifically at combat operations. Military Construction project planning and programming rules have evolved over the decades through congressional legislation and they provide the means by which installations acquire the resources and authority necessary to provide major facilities to support the Air Force missions in a peacetime and wartime environments. Military Construction projects generally take about 5 years to complete, from project identification to completion (Mathews, 2006). Due to the urgency and uncertainty of facility requirements in a contingency environment, Congress developed Contingency Construction Authority (CCA) to meet operational requirements. Contingency Construction Authority gives the Secretary of Defense the authority to carry out a military construction project not otherwise authorized by law, if deferral of the project for inclusion in the next Military Construction Authorization Act would be inconsistent with national security or national interest. If the Secretary of Defense deicide to exercise this authority, he/she will submit a report to the appropriate committee with the justification for the project and a cost estimate. Construction may commence as early as seven days after electronic notification to the committee (or 14 days

if in hardcopy form) (U.S. House of Representatives, 2007). Despite the expedited CCA process, facility construction is often slow and constrains wartime operations (Belasco & Else, 2005). The focus of this thesis effort is to explore the intent of the CCA process and compare that intent with current CCA use in Iraq and Afghanistan.

General David Petraeus, upon departure from command of Multi-National Force-Iraq, recommended legislative, programming, and regulatory reform to improve the Department of Defense's (DoD) ability to operate in combat and contingency operations. This recommendation was specifically targeted to reduce the time from requirement identification to construction and to provide flexibility in contingency operations. His concerns were echoed by Deputy Secretary of Defense William Lynn. Secretary Lynn stated that the current legal constraints limit U.S. forces' ability to use funds, which hinders effectiveness, as personnel may not be well equipped or prepared to avail themselves of the complex waivers and reviews provided for in the acquisition system. Furthermore, the rapid identification of requirements in a contingency environment should be followed by an equally rapid resourcing and equipping response to yield substantial improvements in our ability to conduct operations. In order to address these issues the DoD will require sustained engagement with Congress (Lynn, 2009).

This chapter will introduce the research performed which was segregated into the below list of eight topics.

1. Motivational Anecdotal Evidence
2. Background
3. Research Questions/Objectives
4. Conceptual Framework
5. Methodology

6. Scope and Limitations
7. Implications
8. Thesis Organization

Motivational Anecdotal Evidence

While in Iraq, I observed the problems of CCA first hand. Air Force Civil Engineers have been responsible for validating projects and executing the project programming process for the Joint Acquisition Review Board (JARB), Joint Facility Utilization Board (JFUB), MILCON, and CCA projects. I, along with a number of colleagues, have witnessed several problems executing the CCA process. After I arrived in theater, I familiarized myself with the Army's processes and regulations surrounding facility and infrastructure planning and programming requirements, which are similar to the AF process and regulations. Contingency Construction Authority projects generally took a minimum of nine months to approve. This time span was particularly problematic while programming projects needed to beddown surge forces in Iraq were deployed. As one would expect, the surge of more than 20,000 troops required several large-scale projects that exceeded the $750,000 MILCON statutory threshold; projects costing more than the threshold require formal congressional review and approval thru the MILCON process or potentially thru the CCA process. Due to the lengthy CCA process (Belasco & Else, 2005), leadership across theater encouraged staffs to pursue alternative programming avenues to facilitate the attainment facilities required to meet mission timelines. This seeking out of alternative programming avenues had a significant impact on project cost, schedule and performance. Although looking for legitimate alternative funding avenues for projects is a common practice for programmers, a gray area exists as a programmer moves toward project splitting. Often practices such as blatant project splitting are of great concern AF civil engineers,

because it deviates from the original project acquisition process. Theoretically, CCA only requires congressional notification, while approval can occur in as few as seven days after notification (U.S. House of Representatives, 2007).

Additionally, I witnessed the circumventing of procedures which frequently resulted in projects that did not adequately support the mission, did not comply with regulations, and endangered lives. Project splitting occurs when a projects is split into smaller less costly projects in order to get costs under the statutory thresholds of MILCON. This often lowers the approval authority and shortens the project programming time. This results in less oversight by outside agencies and higher headquarters. Often, outside agencies slows down the project acquisition process. Project splitting is a strategy used in response to slower funding avenues such as CCA and MILCON.

For example, a project was submitted to an AF civil engineer from a subordinate command for validation. The project was an Overhead Cover (OHC) project to protect living quarters. Headquarters' engineers and programmers are often familiar with the Engineer Research and Development Center's (ERDC) approved design that was ubiquitous and successful throughout the theater. The design consisted of a pre-detonation layer with a fragmentation catch layer about five meters below (as illustrated below). The design also was robust enough to prevent progressive collapse. (Roth & ect, 2007) The project submitted consisted of a pre-detonation layer only with no account for progressive collapse. This design would likely increase the fragmentation effect on the occupants and possibly crush the remaining injured and uninjured occupancy if the Indirect Fire (IDF) struck a critical node in the structure.

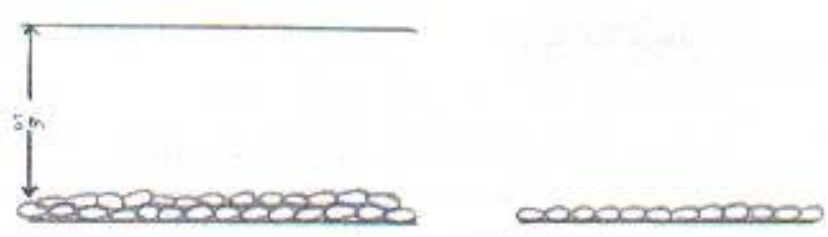

Figure 1: Overhead Cover Example

Correct Incorrect

The subordinate command was directed to ERDC, but the unit refused to engage with ERDC's designers. Ultimately, the subordinate commander confessed that the structure was already constructed and the funds were required to pay the contractor. The subordinate command knew the project would require MILCON or CCA funds. Because of the slow and dysfunctional programming process, they felt it paramount to get the project completed as soon as possible, by any means possible to protect their troops. For this reason, the subordinate commander split the project into multiple OHC structures "protecting" each small individual billeting structure. In the subordinate commander's mind, this lowers the approval authority to the base commander. Unfortunately, no engineering expertise existed at or below that level of approval authority. While there are several motivational and ethical dilemmas at play here, the crux is likely the dysfunctional project programming process.

The example discussed above is only an indication of the many different practices that take place in a contingency environment. According to various AF civil engineers, many of these practices stemmed from the dysfunctional funding process.

Background

Congressional legislation and DoD fiscal regulations have evolved over time in order to direct the planning and programming process of construction projects, both in times of peace and

war. Once a mission requirement is identified, engineers or contractors design the appropriate project in order to meet the requirement (Department of the Air Force, 2003). The scope of a particular construction project alludes to the complexity of specification, cost and time that is inherent in a project of that magnitude. To determine the scope of a project, a project programmer will obtain a cost estimate by either performing a cost estimate or by acquiring cost estimates from contractors. After acquiring a cost estimate, the appropriate funding avenues are identified based on projected cost and type of project. In a contingency environment, mission requirements frequently have critical time lines and are the most heavily weighted variable (time) in the project planning and programming decision-making process. After the facility requirement and associated timeline have been established, the project is usually modified in order to meet the requirements of the regulatory and legal funding avenue (Department of the Air Force, 2003).

Research Questions/Objectives

The purpose of this thesis is to capture the intent of the governing fiscal regulations and qualitatively explore the effectiveness of the regulation's intent. This research also seeks to capture the unintended effects of the regulations on the cradle to grave process of mission requirement identification, project programming, design, construction, use, and any other emergent issues that were revealed during this effort. The specific questions addressed are as follows:

1. What is the intent of CCA?
2. How is CCA being executed?
3. What are the unintended consequences of the CCA process?

Question 1 is answered during the literature review and confirmed during the interview process. Questions 2 and 3 rely more heavily on the interview process.

Scope and Limitations

This case study is bounded within the Iraq and Afghanistan theaters of operations with the exception of participants functioning at the Pentagon involved with theater operation. The vertical range of command ranges from Air Staff personnel to project engineers. The breadth of this study ranges across functional areas to include Commanders, Engineers, Lawyers, Acquisition Attorneys, Staff Officers and Program Managers. This exploratory qualitative case study represents the ideas and experiences of the participants interviewed. For this reason, I sought participates from a variety of career fields, services, ranks and level of command in order to solicit a comprehensive and diverse response. Often, there was a large time gap between many of the respondents interviews and their contingently experience. Therefore, participants experiences are less vivid in their memory, than during or immediately after there experience. Additionally, participant experience with procedures and process varied by location and time. This effort does not seek to provide a solution, but merely document the challenges and successes associated with the existing regulatory structure.

Implications

Academic Contribution

This effort seeks to contribute to the academic literature associated with creating policy for organizations; such fields include organizational behavior, systems analysis, knowledge management, business process improvement and so forth. Specifically, the processes which

organizations undertake to govern operations, control cost and meet legal requirements in various environments. Additionally, this research aims to expand the application of structuration and adaptive structuration to organizational behavior.

DoD Contribution

The goal of this research is to have positive influence on the means by which the DoD executes contingency construction in direct support of operations in a combat environment. More specifically, this effort seeks to increase the effectiveness of planning and programming of MILCON and CCA projects and to increase clarity of the CCA process.

Summary

Congress established CCA to enable the Secretary of Defense to execute military construction in a contingency environment due to the urgent nature of expeditionary military operations. Anecdotal evidence suggests that the DoD is not using CCA as expeditiously and extensively as Congress intended. In addition to deviation from regulations, anecdotal evidence indicates consequences associated with these deviations may not have been considered when the regulatory structure was established to guide the CCA process. The United States has spent a significant amount of funds on contingency construction in Iraq and Afghanistan and the cost continues to grow at an astounding rate. In the FY2005 Supplemental, DoD requested $1.0 billion for military construction to support Afghanistan and Iraq either in-country or in surrounding countries. That amount compares to the $912 million in total funding for military construction for those purposes in previous supplementals since the 9/11 attacks (Belasco & Else, 2005). In the FY 2007 Supplemental, DoD received an additional $1.7 billion for military construction, almost doubling the previous peak in FY 2005 (Belasco, 2008). For this reason, this thesis seeks to document the challenges associated with executing contingency construction

within the existing regulatory structure. In doing so, establishing a foundation by which further research can be conducted to correct deficiencies, if found. The theoretical framework draws upon the theories of structuration and adaptive structuration to provide a lens by which organizational behavior of the complex bureaucratic structure of the DoD can be analyzed, which will be explained in depth later in this paper. I used a qualitative methodology to gain insight into CCA's intent and practice. This methodology was chosen because of its' strengths with regard to the richness of data gained from interviews with germane respondents (McCracken, 1988). However, the limitation of this methodology is that the data collected only represent the ideas and experiences of the respondents interviewed. The implication of this thesis effort is intended to give insight to the DoD and academic body literature associated with creating policy for organizations.

Thesis Organization

Chapter two will present a review of the literature surrounding CCA. The current existing literature consists of regulations & instructions or documented anecdotal evidence. Chapter three describes the methodology used to qualitatively explore contingency construction. Chapter four outlines results of the qualitative data collection and the analysis of data by means of open coding, as defined in qualitative literature. Chapter five provides a discussion and conclusion of the research and gives recommendations for future research.

II. Literature Review

Chapter Overview

This chapter examines the literature surrounding the advent and use of CCA as well as the underlying theory used to explain the impact of the MILCON and CCA regulatory structure on programmers and decision makers in contingency environments. This chapter serves as a foundation for developing the research protocol that follows in Chapter three. This study was guided by the research questions presented in Chapter one.

Limited literature exists that evaluates the CCA process from the prospective of intent, functionality and residual consequences of that functionality. The United States Code and Service specific regulations provide a window into the intended procedures that provided the means to conduct military construction to support the defense of our nation, but little procedural literature exists beyond that. Congressional Research Service (CRS) reports have documented some of the contentious issues that may affect the CCA process, as well as, many of the costs associated with contingency operations. All these resources help to contextualize the research questions. Some of these resources provide insight into possible answers to the research questions posed and some will allude to gaps in the literature, providing further justification for this study. More specifically United States Code, DoD and Service specific regulations provide a foundation to answer the question, "what is the intent of CCA?" (Question #1) CRS reports give some account of how DoD executes CCA and the challenges and consequences that face military leadership in executing contingency construction. In doing so, CRS reports provide some answers to "how CCA is being executed?" and "what are the unintended consequences of the CCA process?" (Question #2 & #3)

Finally, a review of Structuration Theory and Adaptive Structuration Theory provides a conceptual framework to further clarify the organization behavior that affects contingency construction in the DoD and serve as a foundation for developing the research protocol that follows in Chapter three. Before looking at how the MILCON and CCA process came to be, it is useful to review the three questions driving this research effort.

Research Questions

The purpose of this thesis is to capture the intent of the governing fiscal regulations, qualitatively explore the effectiveness of the regulation's intent and the impact of the regulatory structure on programmers and decision makers in contingency environments. This research also seeks to capture the unintended effects of the regulations on the cradle to grave process of mission requirement identification, project programming, design, construction, use and any other issues that were revealed during this effort. The specific research questions are as follows:

1. What is the intent of CCA?
2. How is CCA being executed?
3. What are the unintended consequences of the CCA process?

Question 1 is answered during the literature review and confirmed during the interview process. Questions 2 and 3 rely more heavily on the interview process.

Question One

"What is the intent of CCA?"

On July 12, 1982 the 97th Congress signed CCA into law under Public Law 97-214, Stat. 155 (U.S. 97th Congress, 1982). Public Law and Regulations certainly allude to the intent of the CCA process, but determining the expected consequences may be more difficult. Literature that

reveals the intent resides in the documentation of the legislative process. The literature explored in support of question one will lay a foundation of comparison for question two and three. There is limited published literature outlining the current use of the CCA funding process. The Army, documenting a Judge Advocate's (JA) experience with the use of CCA and contingency construction, published a qualitative article (Hughes, 2005). Additionally, the CRS has documented historical CCA spending and legislative decisions on the contingency construction issue, which will be articulated throughout this section.

United States (U.S.) Code and Air Force regulations offer some insight into how our nation's military leaders are expected to execute military construction in a contingency environment. United States Code provideds three provisions to guide such contingency construction: Title 10 United States Code Section 2803, 2804, 2808.

Title 10 United States Code Section 2803: Emergency Construction authorizes the Secretary of Defense to

> carry out a military construction project not otherwise authorized by law if the Secretary determines that the project is vital to the national security or to the protection of health, safety, or the quality of the environment and that the requirement for the project is so urgent that deferral of the project for inclusion in to the next Military Construction Authorization Act would be inconsistent with national security of the protection of health, safety, or environment quality, as the case may be. The maximum amount that the Secretary concerned may obligate in any fiscal year under this section is $50 million. A project carried out under this section shall be carried out within the total amount of funds appropriated for military construction that have not been obligated (U.S. House of Representatives, 2007).

Title 10 United States Code Section 2804: Contingency Construction authorization gives the Secretary of Defense the authority to carry out a military construction project not otherwise authorized by law, if deferral of the project for inclusion in the next Military Construction Authorization Act would be inconsistent with national security or national interest. If the Secretary of Defense decides to exercise this authority, the DoD will submit a report to the

committee with the justification for the project and a cost estimate. Construction may commence as early as seven days after electronic notification to the committee (or 14 days if in hardcopy form) (U.S. House of Representatives, 2007).

Title 10 United States Code Section 2808: Construction authority in the event of a declaration of war or national emergency is similar to CCA, in that the Secretary of Defense "may undertake military construction projects, not otherwise authorized by law, that are necessary to support such use of the armed forces." Again a similar report must be submitted to the appropriate congressional committee, but this authorization goes on to say that "such projects may be undertaken only within the total amount of funds that have been appropriated for military construction, including funds appropriated for family housing, that have not been obligated" (U.S. House of Representatives, 2007).

The common thread among these three U.S. Codes is that the Secretary of Defense has the authority to execute construction, if deferral of the project for inclusion in the next Military Construction Authorization Act would be inconsistent with national security or national interest

Not only does U.S. Codes make allowances for expedited construction in a contingency environment, but current governmental leadership, such as the honorable Senator Carl Levin, continues to advocate for such policy. In Senator Levin's review of the S.3001 - National Defense Authorization Act for Fiscal Year 2009, he advocated to continue the powers granted under CCA and MILCON by stating "Section 1616 of the National Defense Authorization Act would limit the availability of funds for various large scale infrastructure projects in Iraq and appears to apply to military construction projects, including projects to support our forces under the Contingency Construction Authority. If this interpretation is correct, this provision places at

risk those projects for operations and force protection" (Levin, 2008). The comment by Senator Levin reinforces the intent of CCA as described in U.S Code.

In addition to U.S. Codes, Air Force instruction (AFI) 32-1021 5.2.3 and 32-1021 5.2.4 provide references to *Contingency Construction* (CCA,10 U.S.C. 2804) and *Construction Authority in the Event of Declaration of War or National Emergency* (10 U.S.C. 2808) by enabling an expedited approval process in a contingency environment. However, the "use of this authority is rare and requires a determination that the project is so urgent that use of other authorities is inconsistent with national security." Furthermore, "The Secretary of Defense may authorize the services to undertake military construction projects not otherwise authorized by law. The Air Force may undertake these projects only within the amount of funds appropriated. The Secretary of Defense will provide guidance at the time this authority is needed" (Department of the Air Force, 2003).

Although Congress granted the authority to undertake construction in support of contingency operation the same emphasis was not placed on the funding of contingency construction. Hughes, an Army JA expresses his view of the funding process by stating that

> Congress has used its power of the purse to create an extensive body of fiscal law to control military spending, and thereby check executive powers. Before undertaking any mission, a commander must have express legal authority for each expenditure of public funds. An official who obligates funds for an improper purpose or with the wrong "color of money" will therefore be culpable because Congress has not appropriated any amount at all for that purpose. Failure to observe these requirements may result in a violation of the Anti-Deficiency Act (ADA), which requires an immediate report to the President and Congress (2005).

Based on this literature, there is an indication that significant emphases has been placed on the control of funds and understandably so due to the magnitude of funds required for such military construction. The CRS has evaluated the use of MILCON and CCA funding in Iraq and Afghanistan. The report quotation below outline the magnitude of funds being dedicated to

contingency construction and highlights the fact that contingency construction costs are growing at a rapid rate. For this reason, it is sensible to say that it would be prudent for the DoD to ensure funds are being used efficiently, as such, this is the motivation and catalyst for this research.

> In the FY2005 Supplemental, DOD is requesting $1.0 billion for military construction to support Afghanistan and Iraq either in-country or in surrounding countries. That amount compares to the $912 million in funding for military construction for those purposes in previous supplementals since the 9/11 attacks (2001-2004)" (Belasco & Else, 2005). In the FY 2007 Supplemental, DoD received an additional $1.7 billion for military construction, almost doubling the previous peak in FY 2005 (Belasco, 2008). In FY 2008, DoD received an additional $2.7 billion for war-related military construction (Belasco, 2008).

United State Code, governmental leadership and service regulations have provided some insight into the intent of the CCA process. Furthermore, CRS has outlined the magnitude of funds the United States has dedicated to such projects, highlighting the importance of such legislation. Major Brian Hughes, an Army JA, gives further insight into the process as he recognizes that

> Congress created the three-tiered system of MILCON, Unspecified, Minor Military Constriction (UMMC), and O&M funding in 1982. During peacetime Congress provided close oversight, maintaining the existing Cold War military infrastructure while delivering pork barrel spending to their districts. While the system worked reasonably well under normal circumstances, during contingencies the system was cumbersome and slow. Even Congress recognized that the lack of a dedicated source of funding for contingency construction needs [and this]… can impede timely response to urgent requirements of armed conflicts" (Hughes, 2005).

After reviewing the literature surrounding CCA, it is clear that Congress has intended to provide the Secretary of Defense the flexibility to expedite contingency construction operation to insure that military actions are consistent with national security or national interest. However, it is equally clear that Congress requires the DoD to remain within previously approved budgets authorization for military construction, which were based on deferent needs. This need has arisen because of the fiscal controls that have been placed on such endeavors due to the amount

of funds being spent. This intent is further substantiated by a CRS report documenting the practice of CCA, noting, "Congress has also provided DoD with additional flexibility to initiate military construction projects without advance authorization in order for DoD to move more quickly to meet wartime needs" (Belasco & Else, 2005). It is now logical to compare the intent of CCA with the actual practice and look for deviation.

Question Two

"How is CCA being executed?"

The second question driving this research is how the DoD is using CCA. To gain an understanding of the practitioner's execution of CCA, we look again at Hughes work along with CRS reports. In addition to these historical accounts, this research intends to gather more clarity on this question through interviews with current practitioners.

In order to understand how CCA is being used it is useful to become familiar with the programming processes that surround CCA. I did this by looking at several integral players in the programming process. Judge Advocates work closely with commanders in the field to help them navigate through fiscal law in acquiring authority to conduct their missions. Major Brian A. Hughes documented his observations noting, "Commanders in the field often chafe at fiscal laws, especially when a mission imperative requires military construction. Fiscal law requires MILCON dollars, but a commander often only has O&M funds available. To meet the commanders' intent, JAs may be tempted to skirt the fiscal law issue by creating an imaginative solution that would permit O&M funding. Rather than giving into temptation, however, a JA should firmly resist engaging in any subterfuge" (Hughes, 2005). The existence of a need to develop "imaginative solution(s)" to meet wartime "mission imperatives" to which Major Hughes refers is another key motivation for this research effort.

A CRS report has documented the practice of CCA noting "Congress has also provided DoD with additional flexibility to initiate military construction projects without advance authorization in order for DoD to move more quickly to meet wartime needs. At the same time, the committees have voiced concerns about insufficient or lack of information from DoD about the use of funds for construction projects in Iraq and Afghanistan and whether all projects requested qualify as emergency spending" (Belasco & Else, 2005). Contingency Construction Authority has provided the authority to use funds in a timely manner, but if the funds are distributed from the annual supplemental funds once a year, the funding process may negate the flexibility and timeliness provided by CCA.

Adding to the confusion of contingency project programming is the definition of permanent structures and project qualifications for emergency contingency construction funding. The consternation may reside in the conflict between the simple pay back period calculations in the economic analysis and the uncertainty associated with contingency operations.

Recent congressional action amplified in H.R.1268, the FY2005 Supplemental, suggests that DoD's plans for military construction in and around Iraq and Afghanistan are of considerable concern. The House version of H.R. 1268 cuts funding for one overseas project in Afghanistan stating that the cost of constructing a permanent facility rather than a temporary one would not pay off until 2012. The House report also voices concern about the lack of information on how the construction projects requested in the supplemental are integrated with the Department's long-term strategy for the basing of U.S. forces in the Central Command Area of Responsibility (AOR). The report also questions the emergency nature and lack of information for Congress review about plans to commit the United States to substantial military construction in Kuwait. In the Senate report on H.R.1268, the appropriators' voice considerable

concern about whether all projects requested meet the emergency test of a supplemental. The Senate Appropriations Committee also questions whether the construction of permanent facilities (where proposed), rather than those of a more expeditionary (temporary) nature, is appropriate, adding that in light of the expeditionary nature of our Nation's efforts in Southwest Asia, the Senate panel expects that temporary facilities would be the rule rather than the exception. Emergency funding would not seem appropriate for projects requiring long-term planning according to the panel (Belasco & Else, 2005).

The concerns raised by the Senate Appropriations Committee about permanent facility and long term planning seem reasonable for most conventional expeditionary operation, but counterinsurgency operations are known by military theorist to be long and protracted (Petraeus & Mattis, 2006). It is apparent in the report that contingency operations are fluid, making long term planning difficult. For this reason, long term economic analysis justification is difficult to acquire, because long term planning in a contingency environment is extremely difficult as can be seen in these discussions from 2005 as well as long term Operation Enduring Freedom planning being discussed in the popular press today in 2010, 5 yrs later.

In addition to the procedural confusion for establishing economic justification, political sensitivities further muddy the water with regard to permanent basing in the Southwest Asia. CRS reports note that

> Funding of military construction has been controversial for two reasons; concerns among some members that construction indicates intent to set up permanent bases in Iraq and construction funding in the United States that is part of proposed plans to increase the size of the force, and not clearly an emergency. Although DoD has not ruled out retaining bases in Iraq, current guidelines limit the use of concrete structures and emphasize building relocatable units and the FY 2007 Supplemental continues a prohibition on spending funds to set up permanent bases in Iraq (Belasco, 2008).

Much of the literature explored has revealed that there is a gap between acquiring the authorization for CCA and the funding of CCA, as CCA is often funded through supplemental bills as opposed to funds being readily available. This may be attributed to the requirement to reprogram MILCON projects in the United States, as it would divert spending and economic impacts from congressional districts (Hughes, 2005). Additionally, there is substantial controversy over what projects qualify for CCA. Now that information has been presented on how CCA is being used, it is reasonable to now look at the consequences of such use.

Question Three

"What are the unintended consequences of the CCA process?"

The third question involves the analysis of a complex system. When agents create or change policy in a complex system, it is often impossible to predict every consequence that could precipitate. Furthermore, as literature is explored it may be difficult to distinguish between policies and mechanisms associated with the advent of CCA or policy that was created to compensate for consequences that were discovered later and were unexpected. Additionally, this question is the most salient portion of the motivation for this research effort. Documented and anecdotal evidence previously discussed suggests that the DoD is not able to use CCA as it was intended. Consequently, the DoD has used practices such as possible project splitting, non-optimal project redesign, Logistics Civil Augmentation Program (LOGCAP) servicing instead of construction, and relocatable buildings. If this is the case, one may be curious if this is more costly than a functioning or re-designed CCA process, which allows for higher project cost ceilings and expedited access to additional funding. This research effort does not seek a quantitative comparison costs, but it does aim to shed light on practices that would likely influence cost, in hopes to provide artifacts for follow on research in that area.

United States Code and AFIs provide some insight into the consequences associated with CCA. The important language that exists in these regulations pertains, not to the authority to spend money, but the ability to distribute funds. This important nuance must be recognized in order to fully understand the way CCA is used and the consequences that arise. Air Force Instruction 32-1021 5.2.3 and 32-1021 5.2.4 provides references to Contingency Construction (10 U.S.C.2804) and Construction Authority in the Event of Declaration of War or National Emergency (10 U.S.C. 2808) in enabling an expedited authorization process in a contingency environment. "The Secretary of Defense may authorize the services to undertake military construction projects not otherwise authorized by law. The Air Force may undertake these projects *only within the amount of funds appropriated* (Department of the Air Force, 2003). The final control placed on CCA restricts funding to "the total amount of funds that have been appropriated for military construction, including funds appropriated for family housing, that have not been obligated" (U.S. House of Representatives, 2007). This is an important aspect of the contingency construction policy, as funds must already be appropriated for military construction. Major Hughes elaborates on this analogous point when discussing 10 U.S.C. 2803: Emergency Construction, by stating that the main disadvantage to Emergency Construction is that it

> merely provides authorization to spend funds, and not an actual appropriation. Funds to finance the authorization must be reprogrammed (with congressional approval) from unobligated MILCON funds…and Congress would be reluctant to approve cancellation of a required project to fund and emergency construction project unless there was a truly dire need. Given this limitation and an aversion to robbing Peter's congressional district in order to pay Paul for contingency construction somewhere else, the military rarely evokes the Emergency Construction Authority (Hughes, 2005).

Similar to Emergency Construction, CCA has historically been paid for out of the annual supplemental bills, presumably to preserve funds previously dedicated to MILCON projects in

the states. This is the crux of the CCA process problem, in that the lack of funding negates any flexibility and expediency gained by the authorization.

Hughes notes that the FY 2003 Emergency Supplemental authorized the Secretary of Defense to transfer $150 million of O&M funds to this statutory authority for combat and contingency construction. Contrary to its own declared preference, however, Congress has not fully funded 10 U.S.C. 2804 (Contingency Construction) in subsequent years. The FY 2005 Nation Defense Act only provides $10 million for contingency construction under 10 U.S.C. 2804 Contingency Construction (Hughes, 2005).

On 16 November 2001 President Bush issued Executive Order 13,235 which specifically invoked 10 U.S.C. 2808 (Construction Authority in the Event of Declaration of War or National Emergency) in response to the terrorist attacks. The only other time a president has invoked this authority was during the first Gulf War. As of 2005 the Department of the Army has not issued any specific guidance or procedures for undertaking military construction under this authority. While U.S. Codes such as 2808, and CCA provides greater responsiveness than the normal three-tier system of the Military Construction Codification Act, these chronically ignored and underfunded emergency statutory authorities ultimately do not solve commanders' combat and contingency construction problems (Hughes, 2005). This sentiment is echoed still today as DoD leaders recently completing tours of duty in theater request fiscal reform, stating that "the current legal constraints limit U.S. forces' ability to use the funds which hinders effectiveness" (Petraeus, 2008).

Alternative Funding

Project Splitting

In addition to the funding of U.S. Codes authorizations, AFIs offer further insight into possible consequences under current fiscal regulations. Air Force Instructions reference the practice of project splitting as a possible consequence of the current project programming

structure. To understand the implication of project splitting it is useful to recognize what it is and how it is done. Hughes offers a brief discussion of the practice of project splitting and its implications and states illegal project splitting occurs when a single military construction project is broken down into several smaller projects to reduce its cost below applicable statutory thresholds. Judge Advocates and programmers should determine whether the individual components of a project are interdependent or merely interrelated components and may be funded separately. Interdependent facilities are mutually dependant in supporting the functions for which they were constructed and therefore must be costed as a single project. In contrast, interrelated facilities have a common support purpose but are not mutually dependent and are therefore funded as separate projects. Interrelated facilities are each complete and usable in their own right, and may be properly funded as separate military construction projects (Hughes, 2005). For example, if a

commander requires the establishment of a base camp in a foreign country. The base camp will be used for an indeterminate duration, but certain facilities such as a perimeter fence and a command and control bunker are required immediately. Other facilities, such as helipad and a motor pool would be welcome, but are not strictly necessary. Second, the JA should determine whether the individual components (in this case, the fence, the bunker, the helipad, and the motor pool) are interdependent or merely interrelated components may be funded separately.

Interdependent facilities are mutually dependant in supporting the functions for which they were constructed and therefore must be costed as a single project, for example, a new airfield on which the runways, taxiways, ramp space, and lighting are mutually dependant to accomplish the intent of the construction project. In other words, a project that is interdependent with another project if it is not a complete and useable facility if built by itself. All of the construction costs related to making the facility complete and usable must be lumped together to determine the total cost. In contrast, interrelated facilities have a common support purpose but are not mutually dependent and are therefore funded as separate projects, for example billets are constructed to house soldiers with the subsequent construction of recreation facilities. Their common purpose to support health, welfare, and morale creates an interrelationship. However, neither facility is necessary for the operation of the other. Interrelated facilities are each complete and usable in their own right, and may be properly funded as separate military construction projects (Hughes, 2005).

In an effort to mitigate project splitting, AFI 32-1021, *Planning and programming Military Construction (MILCON) projects,* guides project programmers to follow a four-step process in requesting construction authority. Air Force Instruction 32-1021.2.2 instructs project programmers to first determine the requirements, then evaluate alternatives solutions, select the construction project to meet the requirement and finally initiate programming action by submitting appropriate documentation (Department of the Air Force, 2003). Often project programmers are forced into a more practical sequence of determining the requirement, looking for the funding avenue, and then determining the project that will fit the funding avenue.

As referenced in Chapter one, project splitting anecdotally seems to be a practice used among project programmers in a contingency environment to get a project to fit a funding avenue. Air Force Instruction 32-1021.3.2.2 and AFI 32-1021 4.2.2 attempts to mitigate this by stipulating, "Each MILCON project shall result in a complete and usable facility or a complete and usable improvement to a facility." Furthermore, in the case of Unspecified Minor Construction (UMC), "splitting requirements to keep project costs below the UMC threshold is prohibited. An UMC project shall not be accomplished concurrently with a MILCON project in the same facility. Combining UMC funds with other fund types to accomplish a single requirement is prohibited" (Department of the Air Force, 2003).

Relocatable Buildings

One of the means by which commanders can acquire facilities to meet their mission requirements in a timely manner is the use of relocatable buildings. A functioning CCA process would facilitate the acquisition of a less mobile concrete masonry unit (CMU) building and likely at a much reduced lifecycle cost. Because the CCA process is slow commanders look for projects that can be funded with O&M money.

Commanders should consider the use of relocatable buildings as a means of satisfying a construction requirement, and not as an avenue of escape from the restriction on O&M funding. Relocatable buildings may be used in one of two ways, either as a substitute for permanent construction or as an interim facility requirement. Relocatable buildings can be used instead of conventional permanent construction, particularly overseas, when the requirement duration is unknown (Hughes, 2005).

Logistics Civil Augmentation Program Service Contracts

Another programming alternative for meeting construction requirements is the use of LOGCAP service contracts. Under an umbrella contract run by the U.S. Army Materiel Command, LOGCAP contractors will provide commanders with comprehensive logistics, engineering, and construction support during a contingency operation anywhere in the world on a cost-plus-award-fee basis. Since December 2002, the military has contracted for more than $12 billion in LOGCAP services in more than half a dozen countries, including $5.6 Billion in Iraq through May 2004. When LOGCAP is used in support of a mission, the operational commander becomes responsible for defining services to be provided by the contractor, integrating contractor personnel into the mission, and ensuring that funding is provided (Hughes, 2005).

"Under the Reres Doctrine, construction performed by a LOGCAP contractor could be paid for with O&M funds where the construction was clearly intended to meet a temporary operational requirement to facilitate combat or contingency operation" (Hughes, 2005). The Reres doctrine is named after General Matt Reres the Deputy General Counsel on Ethics & Fiscal law, who signed the policy letter (titled Construction of Contingency Facility Requirements (22 Feb. 2000)) enabling the use of O&M funds for construction during contingency operation (The Judge Advocate General's Legal Center and School, 2007). "Since LOGCAP was only available during wartime or contingency operation, and since the services required were always related to the Army's operational mission, no fiscal issue arose. The

LOGCAP contractor is tasked with a service, such as troop bed-down or mess support, and then builds the facilities required to perform that service. The LOGCAP contractor charges the cost of the facility as part of the contractor's overhead, and the title to the building passes to the Army. Funneling construction through LOGCAP, therefore, allowed the Army to accomplish indirectly what fiscal laws prohibited it from doing directly. Until the demise of the Reres Doctrine, units in Iraq took full advantage of the LOGCAP loophole" (Hughes, 2005).

When LOGCAP was approved in October of 2003, the full consequence of the congressional rejection of the Reres Doctrine had yet to be realized. Soon after, however Combined Forces Land Component Commander (CFLCC) had become uneasy about the gray area created by LOGCAP construction and O&M funding. By December 2004, CFLCC's successor, the Multi-National Force-Iraq (MNF-I) had decided that there was no LOGCAP exception to buying construction services, especially when there were no services contemplated other that the construction itself. Any other interpretation would allow LOGCAP to swallow MILCON funding rules entirely (Hughes, 2005).

After taking a brief look at a small portion of the complicated web of programming rules and loopholes that exist, it is clear that programming acrobatics are required to procure facilities to support contingency operations. Furthermore, often times DoD "personnel may not be well equipped or prepared to avail themselves of the complex waivers and reviews provided for in the acquisition system (Petraeus, 2008). Therefore, it is likely that cost, oversight, sound planning and design may be compromised. During the data collection process for this research, which I will develop in the next chapter, further clarity is likely to be gained. The methods outlined in chapter three guided the data collection. The following section will highlight the literature used to build this methodology.

Methodology

CCA is evaluated by drawing upon the concept of Structuration Theory, first inspired by Giddens (1979) and Adaptive Structuration Theory (AST), first proposed by Poole & DeSanctis (1990). Giddens defined Structuration as "the structuring of social relations across time and space, in virtue of the duality of structure" (Giddens, 1984). The project programming process exhibits the concept duality of structure, in that the "essential recursiveness of social life, as constituted in social practices: structure is both medium and outcome of the reproduction of practice" (Giddens, 1979, p.5). This duality of structure may help explain the advent of LOGCAP and the constraints placed on it, such as the prohibition of construction only service contracts added upon the creation of MNF-I (Hughes, 2005).

There are many concepts within structuration and AST that are helpful in evaluating CCA. It is useful to understand the distinction between allocative resources and authoritative resources. Allocative resources are authority over objects, goods and materials phenomena; while authoritative resources are authority over persons and agents (Dragos, 2006, p. 45). My hypothesis is that one of the problems that plague the CCA process is that allocative resources and authoritative resources are not aligned. Success in a contingency environment or any collective human action is highly dependant on things such as buildings, machines, vehicles, clothes, rooms, and electricity, water and sewage infrastructures (Orlikowski, 2006). The organizational knowledge literature is also useful in understanding fiscal law and programming procedures. Although organizational knowledge literature is often broadly characterized in to the category of *techno-centric* and *human-centric* schools of thought, Orlikowski uses a scaffolding metaphor to illustrate its complexity (2006). This metaphor is analogous to institutional rules as they are also *temporary, flexible, portable, diverse, heterogeneous,*

emergent, dangerous, generative and constitutive (Orlikowski, 2006). Specifically, institutional rules are *constitutive* in that human activity and their outcomes shape the kind of construction of work that is possible and outcomes become emerge. This emergence of outcomes can manifest in the form of project splitting. These construction outcomes are *dangerous* in that they are temporary, emergent, and rapidly constructed assemblages, that are vulnerable to breakdown and failure (Orlikowski, 2006). This concept of emergent outcomes addresses cost, health, safety and mission salience; all artifacts of project splitting. An example of an emergent health outcome are the health effects of burn pits still being used as a result of the 2004 incinerator projects being stopped due to an ADA violation. Furthermore, Orlikowski uses the concept of *temporal structure*, which can be useful in understanding, why agents may resort to project splitting. Agents use *temporal structuring* in order to produce specified parameters of acceptable conduct (Orlikowski & Yates, 2002). Clock time and event time (*chronos and kairos*) can be a catalyst for *temporal structuring* (Orlikowski & Yates, 2002). The role of a programmer or commander may create and shape the temporal conditions, because of economic or institutional pressure coupled with structural conditions outside their immediate control (Orlikowski & Yates, 2002). The agent creates workarounds and adaptations to speed up or manage time more effectively without fundamentally changing the old structure, even while still believing they are enacting the old structure (Orlikowski & Yates, 2002). The literature surrounding the concept of structuration theory and AST provides a lens by which one can better understand the organizational behavior of agents in a contingency environment.

Constitutional Guidance

After reviewing the literature, it is apparent that there may be a conflict between authoritative and allocative resources. To some extent, that is a result of the checks and balances

of our nation's Constitution that guide our nation's leaders. The Constitution of the United States was signed on September 17th of 1787 at the Pennsylvania State House. The preamble to the constitution states that its intent is to "provide for the common defense" (Jordan, 2001). In order to provide this "common defense," specific guidance must be established in order to orchestrate our nation's leaders and their efforts. The Constitution of the United States provides that orchestration by establishing a system of checks and balances between the executive, legislative and judicial branches of government. The constitution has granted the executive branch the authoritative power to wage war as the President of the United States is the Commander in Chief of the Armed Forces. For the President to wage war, resources must be generated for such an effort. Allocative Power has been granted to Congress to "lay and collect taxes, duties, imports and excises, to pay the debt and provide for the common defense and general welfare of the United States" (Jordan, 2001). Authoritative resources are limited as allocative resources must be garnered, as "no money shall be drawn from the treasury, but in consequence of appropriation made by law" (Jordan, 2001). The appropriation bill releases such money, but not without coordination as "every Bill which shall have passed the House of Representatives and the senate, shall, before it becomes a law, be presented to the President of the United States" (Jordan, 2001).

This constitutional guidance is alive and well today as funds for contingency construction are released from the treasury under the authority of appropriation bills. Emergency construction enables such projects through Title 10 U.S.C 2803; by declaring that emergency construction may be undertaken only within the total amount of funds that have been appropriated for military construction (MILCON), including funds appropriated for family housing, that have not been obligated" (U.S. House of Representatives, 2007). Therefore, funds that DoD has earmarked for

MILCON are used to fund emergency construction or additional funds are made available through supplemental bills to preserve previously allocated MILCON dollars. Furthermore, it can be speculated that congress and local political leadership would be reluctant to cancel MILCON projects in their district as it would divert significant economic stimulus from their district.

Conclusion

In the literature review, insight has been gained with regard to the intent behind CCA, how it is being used and what some of the consequences are, related to programming construction projects in a contingency environment. Furthermore, the theories of structuration and adaptive structuration have provided a lens into the organizational behavior at work in programming contingency construction projects. The following section will present the methodology used for this study. The methodology will draw upon the qualitative research design literature, Structuration theory and AST. This synthesis of literature will guide the development of the interview protocol and analysis.

III. Methods

Chapter Overview

This chapter describes the method used to determine the intent, current use and consequences of the CCA process. The method for this study consists of five major areas: research process, data collection, data source identification, sample population and data analysis. These five areas will be clarified in the following sections by describing the terminology, methods and justification for this study.

Research Process

The qualitative case study method is used to meet the purpose of this thesis. This method has been employed in four different phases with different procedures applied for each phase. Phase I, entailed a literature review of the current DoD regulations and documentation governing the guidelines of construction in a contingency environment in order to outline the intent of the current fiscal regulations. The literature review also included exploration of Structuration Theory, AST and related concepts as a theoretical framework. Phase II consisted of a series of antecedent semi-structured interviews in order to test the interview protocol. The results of the antecedent interviews are analyzed in order to revise the interview protocol, if needed. Additionally, each interview began by informing the interviewee that the research is unclassified in order to avoid classified information that may compromise the publication of the research results. Phase III, is a second more comprehensive set of semi-structured interviews in order to explore the manner in which contingency construction is taking place and the way in which CCA is being used. Finally, phase IV, provides a qualitative review of the results from phase III, by means of open coding, in order to draw inferences about the impact of CCA on contingency

construction projects. This clarifies issues such as project capacity to support the mission, affect of project splitting (and other workarounds) on costs and safety associated with meeting mission requirements and any other issue that may be revealed. The population of interest for this exploratory case study research is personnel that are involved in contingency construction, such as commanders, programmers, design engineers, customers, comptrollers, contracting officers, lawyers and any other salient personnel that were thought to be able to provide insight. There is a challenge due to a time-lapse between many of the respondents interviews and their contingently experience. This is a validity challenge that receives deliberate attention during the interview and data analysis phase. One method to counteract this is giving participants an opportunity to deliberate about the interview and reengage later, after ample reflection. Specifically, participants had two month to provide additional input before the research was complete.

The data collection phase is an area that has been given attention and caution. Access to the population of interest is a key concern. The population of interest is dispersed throughout the globe. Furthermore, commanders and other personnel have limited time to participate in interviews. For this reason, I was flexible in catering to the schedules of the participants. I conducted all interviews in person or over the phone. Respondents were provided complete anonymity in order to solicit candid responses. This is a concern as respondents may have been involved in project splitting which is in violation of fiscal law under the Anti-deficiency Act. Furthermore, data was censored in order to conceal respondents' identity as it may result in harm as defined by the internal Review Board. Furthermore, it is important to note that during the interview and analysis phase I consciously attempted to refrain from letting my personal biases affect the study. Naturally, researchers tend to look for data to confirm their

assumptions and biases. I looked equally for data to confirm and refute my biases in order to generate a broad range of rich data, in hopes to unearth new issues not currently realized.

Data Collection

Data collection for this study was conducted by means of semi-structured interviews. The three questions guiding the study have been dismantled into an interview protocol. The solidification of protocol questions are guided by Structuration and Adaptive Structuration Theory and qualitative literature. The orchestration of the Structuration Theory, qualitative literature and the development of the interview protocol are detailed below.

8 Protocol Questions

Question #1: How do you think the peacetime construction regulatory structure is performing in the contingency environments?

Question #2: Do you think the CCA and MILCON regulatory structure is meeting its intent?

Question #3: Does the time required to execute a CCA project discourage its use?

Question #4: Have you observed any negative or positive consequences with seeking alternative funding avenues? (time/cost/performance)

Question #5: What is your opinion of the MILCON threshold limit?

Question #6: What are the alternatives to seeking CCA and/or MILCON approval, in order to get a project completed?

Question #7: How long does CCA take to get approved?

Question #8: Do you have any solutions you would recommend regarding contingency construction?

Qualitative Approach

A qualitative approach has been selected for its strength in answering the type of questions that drive this study. This study seeks to answer questions relating to *why* a particular phenomenon is occurring. In doing so, it is important to understand the *context* in which the phenomenon is occurring. This study also seeks to identify *unexpected phenomena* and the process in which the phenomena occur, as well as, *causal explanation* of the phenomena. Qualitative research lends itself particularly well to these types of questions, as they are commonly identified strengths of this the qualitative methodology (Maxwell, 2005). Quantitative methods were not selected for this particular effort as this research does not seek to count particular items as the relevant items are not currently know. Furthermore, this research effort does not seek to make an inference about a particular population, rather it seeks to understand the context of a particular process with in a specialized population.

In pursuing the qualitative method, Maxwell provides Figure 2 to illustrate the balance and iteration required to coordinate the competing interests of qualitative research. The following figure includes the key components of qualitative research design and illustrates the interconnectedness and flexibility of their relationship. It is the purpose of qualitative research design to create a coherent and workable relationship among these components (Maxwell, 2005).

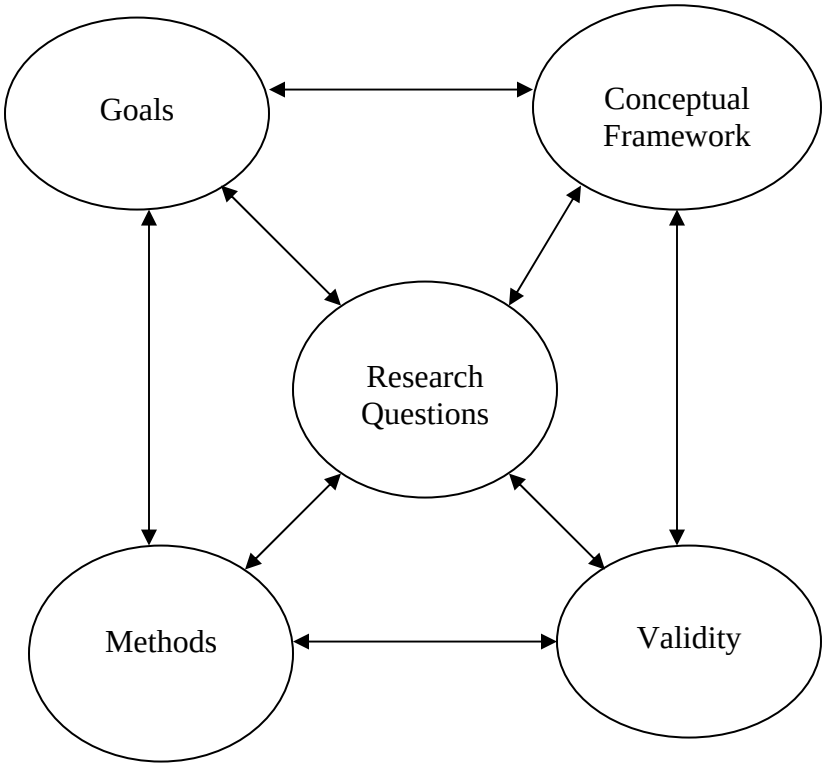

Figure 2: A Model of Qualitative Research Design

Semistructured Interview

This exploratory study, not only seeks to answer the three research questions posed, but also uncovers other relevant ideas that help clarify the CCA issue. For this reason, the semistructured interview approach was selected to "explore the topic more openly and to allow interviewees to express their opinions and ideas in their own words" (Esterberg, 2002). This approach is also "particularly useful for exploring a topic in detail" which is the aim of this effort (Esterberg, 2002).

Structuration Theory

Structuration Theory and Adaptive Structuration Theory (AST) provide a lens into the organizational behavior that precipitates from the construction programming regulatory structure. Structuration Theory deals with social structuring and the interaction with agents acting within that structure. Some simple analogies include forming a line at a store or quieting a boisterous child in a quiet waiting room. Adaptive Structuration Theory looks at how those structures adapt and transform based on interaction with agents operating within the structure. This could be illustrated by observing how law enforcement operates in Compton vs. Beverly Hills California. The agents may have attended the same police academy, but procedures and actions have adapted based on the environment in which they operate. Likewise, the environment adapts to these procedures and both are ever evolving. Structuration Theory and AST define key theoretical terminology and reveal the applicability of concepts such as duality, recursiveness, allocative & authoritative resources and emergent outcomes of temporary structures as they apply to military organizational behavior in a contingency environment. The insight gained through Structuration and AST contribute to the method used to collect qualitative data for this study.

Data Source

I solicited interviewees based on their experience with contingency construction. This study seeks to construct a holistic view of contingency construction. For this reason, a wide range of data was collected from the prospective of civil engineers, commanders, lawyers, programmers, staff officers and customers. In addition to a variety of career and organizational prospectives, participants were selected based on their involvement in the process at various

levels as illustrated in figure 3 below. This form of triangulation is one of many means by which I intended to bolster validity. In the participant solicitation process, it was my goal to interview agents at every level of the process. If this was not possible, interviewing an agent one level or process away from a participant can offer valid conformation that the process exists and limited insight into it. For example, if a participant at the brigade level sends a project request to a missing participant at the Corps level and a participant at the Force level confirms receipt from the Corps, then it is reasonable to assume that the Corps function exists and the interaction can be described.

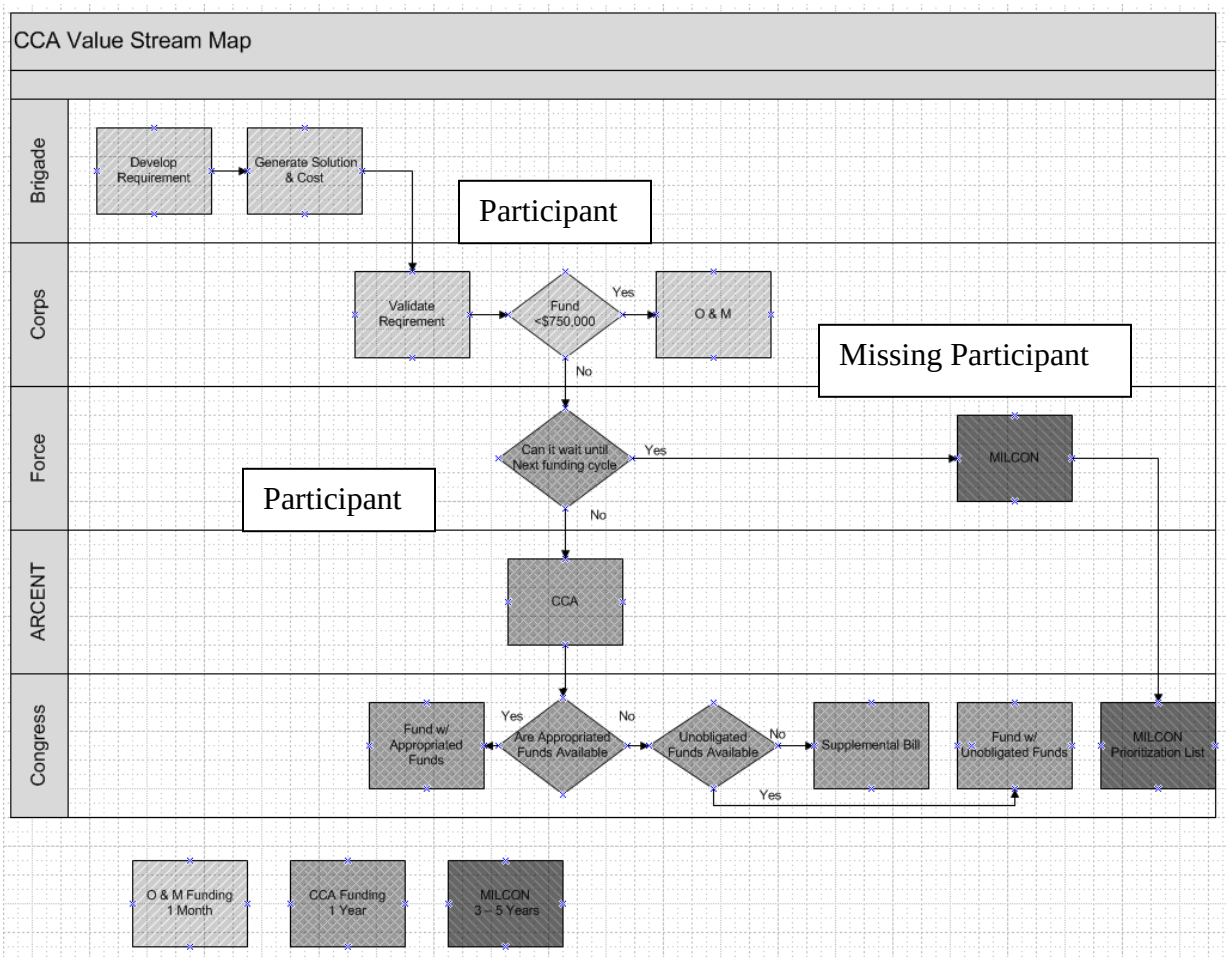

Figure 3: Process Inference Example

Sample Population

The population sampled for this research consists of nine participants with a broad range of experiences covering both Iraq and Afghanistan theaters of operations, coupled with insight from the Air Staff in DC. The sample includes Air Force, Army and Civil Service personnel within the DoD from numerous levels of command. With an average age of nearly 21 years of service, the participant's ideas, presented in this study, represents a depth of understanding within the DoD. As this is an exploratory study, the participants, as you can see below, were not drawn from any particularly narrow demographic. The below table summarizes the population represented in this study.

= Number of Participants

#	Rank	Ave. Yr. Service	#	Occupation	#	Level of Command	#	Service	#	AOR
4	O-6	21.0	1	Support Officer	2	Pentagon	5	USAF	2	Afghanistan/Iraq
1	O-5		1	Army Officer	3	Corps	3	Army	2	Iraq
3	O-4		1	Attorney	1	Embassy/Corps	1	Civil Service	3	Afghanistan
1	GS-13		2	Engineer	2	Group			2	DC
			1	Data Masked	1	Joint Contracting Command				
			2	Civil Engineer						
			1	JAG						

Figure 4: Sample Population

Solicitation took place through email and willing participants were contacted by phone to confirm relevance of experience and establish rapport. Finally, telephone and in-person interviews were conducted and recorded. The recordings were transcribed to provide an audit trail and serve as an object of analysis by means of open coding. The transcriptions were scrubbed of identifying characteristics in order to assure anonymity of respondents.

Data Analysis

The data analysis strategy that was selected for this study is qualitative analysis. A pilot interview was conducted and analyzed to test the interview protocol for usefulness and validity. After the pilot interview was conducted, a series of interviews took place concurrently to further refine the data collection process (Maxwell, 2005). Validity is addressed through long-term interaction with participants, rich data collection, highlight discrepant evidence, triangulation and comparison of result to establish a sense of variance. (Maxwell, 2005) Validity was further strengthened by means of peer validation, as one of the research advisors was present during one interview with two participants to ensure appropriateness of interview procedures. Furthermore, the analysis tables can be found in the appendix for audit purposes and interview transcripts can be requested for further view and validation.

Conclusion

This chapter has outlined the methodology used to collect, properly source and analyze data to answer the questions that drive this study. Specifically, the data collection section described Structuration theory, semistructured interview and the qualitative research approach and offers the reasoning behind their use. Furthermore, the data collection section married the literature review, Structuration Theory and the three research questions to develop the interview protocol. Then the data source, sample population and data analysis sections outlined the specific steps that would take place in order to solicit and analyze the data.

IV. Analysis

Chapter Overview

This Section will present the method used to code and analyze the interview data. The interview protocol was distilled into eight questions that most directly address the three overarching research questions. This section will describe the means by which themes were identified and provide a brief synopsis of the themes, suggestioning of the nature of the interviews. This section will also address a previously stated hypothesis.

Method of Analysis

After I collected data, through recorded interviews, the audio files were sent to a company, which provided transcription services. After receiving the interview transcripts from the transcription service, I reviewed the audio files and the transcripts for accuracy and I removed identifiers to assure anonymity of participants. Identifiers consisted of names, units, dates, locations and so forth. The interviews generated 243 minutes of audio, resulting in 110 pages of transcripts. After the transcript files were prepared for analysis, I began coding.

Coding

In order to code the transcripts I reviewed both the audio and text files simultaneously while looking for statements that pertained to the eight questions derived from the protocol, listed later in this section. Statements were either extracted directly following the questions of interest or pulled from conversation dealing with the question, which may not have been asked directly, because the conversation naturally gravitated to that particular question or issue. Not all the participants were presented with all the protocol questions, as they did not pertain to all the

participants. For example, I would not ask a participant on staff in DC, if he or she was involved in situations that required he/she to look for alternative programming avenues to get a project funded, because he/she was not involved in that process in their job. Likewise, I would not ask a commander about the advantages and disadvantages of funding CCA projects through the Supplemental Bill as opposed to the Appropriation Bill.

The eight questions were entered into an excel table and the germane statements relating to each question were entered in the following columns along with the participant ID number that made the statement. Rather then entering the participants name directly, I used an ID number to represent each participant. I then reviewed the statements and distilled them into there essence, identifying the issue that was being addressed.

Theme Identification

In order to identify themes, the statements, remarks and the participant ID numbers were entered into each row. Then the participant data was populated in the same row in order to identify themes and trends. The participant data consisted of rank, years of service (Yr.), occupation, service and AOR (Area of Responsibility) (Iraq and/or Afghanistan or DC). After the excel table was populated with the questions, statements, remarks and participant data, I highlighted the rows that had similar remarks or rows that had outlier remarks and looked through the participant data to find trends. The example table below contains a list of themes identified for each question. The full list of tables for each of the eight protocol questions can be found in the appendix.

Question 1

"How do you think the peacetime construction regulatory structure is performing in the contingency environments?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
Well I think it's the scale of the contingency environment. You're building cities from the ground up with no infrastructure. And we rarely do that stateside. I mean, if we do it, the Congress knows about it and they budget for it. And over there we are doing more than that. I mean, we are – we are building the infrastructure the buildings and everything else. And, you know, nobody contemplates the true expense of all this. And I'm just – I was just worried that we were circumventing the intent of Congress constantly.	Not working (Funding)	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq	
there's two problems. One, there is a bureaucratic process that has dollar limits on it. And two, it truly only authorizes what is called temporary construction.	Not working (Funding, Process, definitional)	4	O-6	34	Engineer	Corps	Army	Iraq	Process (O-6/ Engineer/ Corps/ Army/ Iraq)
the system is not designed for expeditionary operations. Military construction is a very long and complicated process that requires Congress approval.And a lot of the regulations that we have to abide by are peace time regulations. So, is it accurate in saying that you believe they're not performing in a contingency environment?That is correct. When we mobilize and we go overseas, and we work overseas in a project in a contingency environment, all these restrictions that are peace time restrictions do not help us at all.	Not Working (Process, Time, complicated, congressional approval)	8	O-6	28	Engineer	Corps	Army	Iraq	Process (O-6/ Engineer/ Corps/ Army/ Iraq)
I know we're making extensive use of that. Like I say, about 300 projects a year, maybe worth 220, 230 million, something like that. So, point being that we know the authority we have is a useful tool, because it's being used extensively. We're putting up hundreds of – well, you know, but hundreds of buildings over there – maybe over the course of the 6 or 7 years, maybe – I don't know, up to 2,000 of these little buildings. And we need 'em all, obviously. So, that's a tool that's definitely being used. Obviously, everybody would like to have a higher authority than 750K, but it is being used.	Useful	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Outlier (DC/ Civil Service/ Pentagon)

Table 1: Analysis of Question 1

Theme Synopsis

The theme synopsis draws upon the data identified in the analysis and comment on the overall data for each question.

Question 1

"How do you think the peacetime construction regulatory structure is performing in the contingency environments?"

Question #1 is primarily oriented toward addressing research question (RQ) #1 which is to understand the intent of CCA. It was my understanding going into this research that CCA is a means to bridge the gap between peacetime and wartime regulations. I designed this question to assess CCA's ability to bridge that gap.

Four participants addressed this question with three stating that the peacetime construction regulatory structure is not working or bridging the gap and one participant stating that it is being used extensively and therefore a useful tool, deemphasizing challenges by saying, "everybody would like to have a higher authority than $750K, but it is being used." The other three participants that did not believe CCA was performing well and referenced discontent with amount of funding, the process (burdensome and untimely), the level of approval and interpretation of "temporary construction." This issue of temporary construction was raised several times during this research and I will address it at this time.

The debate centered around the interpretation of temporary construction related to the perceived intent. Some perceived that temporary construction is intended to limit the amount of funds that DoD is spending on expeditionary operations by constructing temporary facilities as our presence is expected to be for a short period. For this reason, some people believe the DoD

should only build facilities with a short life expectancy. Generally, the belief is that the shorter the life expectancy for the facility the less expensive it would cost to build. But this is not true in all cases and therefore, is the crux of the debate. The example often referenced is the dilemma between CMU (concrete masonry units) and CHU (Containerized Housing Units or trailers) to house troops. I will allow the discussion to be rounded out by participant #4's statement below:

> So the restrictiveness of the law does two things, one, in my opinion it goes against the intent of Congress to do it in a cheaper, faster mode. It actually does it in a slower and more expensive mode number one. Number two, CMU, and you know this, it's obviously a far better force protection measure than a CHU…. We were told to stop doing it because of this authority. We were misreading it. We were calling these concrete missionary units temporary and they said that's not temporary. We were stretching the law I think at that time even though we did have JAG concurrence…All those reasons count against temporary construction. And maybe it's a definitional problem? Yes. I think if this were presented to Congress, and every Congressman that ever came through when we presented it to em and I presented it personally in most cases, it was to them it was a no-brainer. They go ah, this is obvious. But whenever they went back it was dead on arrival. It never, far as I'm concerned it fell on deaf ears… The "just good enough" generated additional problems. Number one it frequently added to the cost or obviously, the intent of temporary construction is to do exactly the opposite. It is actually cheaper and faster to build CMU… CMU, and you know this, it's obviously a far better force protection measure than a CHU. That's a problem with the law and that if anything needs to be changed first because the latter has a direct effect on force protection and also has increased casualties in Iraq unnecessarily by forcing us to go the temporary construction route in Iraq. There have been a number of people who have been injured in trailers do to rockets and mortars where if they had been in a concrete unit that would not have occurred. long-term maintenance of those facilities and increased casualties that occur because of it.

Finally, to address the outlier comment, after reviewing the personal data it is apparent that the disagreement is related to the level of command. The pentagon level participants residing in Washington D.C. had a much more positive view while the three contradictory views came from participants that had served in Iraq and Afghanistan, specifically at the Corps level.

Question 2

"Do you think the CCA and MILCON regulatory structure is meeting its intent?"

Question #2 is also related to RQ #1, as it approaches the issue from a different angle, trying to assess the participant's perception of the intent of CCA and if it is meeting that intent.

Four participants address this question yielding seven separately identified statements. All the participants responded similarly, stating it was not meeting its full intent. As this question is similar to the previous question, participant #5's response was somewhat different referencing the usefulness as well as remarking about the lack of timeliness as the other three did. Again, participant #5 is operating at the strategic level of command in Washington D.C.

Assessing CCA's ability to meet its intent is one of the major issues of this study as it is the catalyst for war fighters to seek other means to obtain projects in a more timely manner. Participant #2 summarizes the sentiment well by saying:

> the way CCA was always explained to me was it was a break the glass, got to have it now type of program that, you know, I'm building something, I got – it's more than $750,000.00 and I gotta have it. And then whatever the process is up in DC to get it. And in theory – that's the theory, in practice I never saw it happen. My predecessor briefed me the exactly same thing that I'm telling you now is that you cannot rely on a CCA turning quickly.

There was also an insightful comment regarding CCA's intent that was made by the most senior participant, a Colonel with 34 years of service:

> CCA is really designed to grant authority for projects for where we have no intent for long-term occupation of an area. Where in Afghanistan, that is in fact the plan and that's prohibited a lot of it in Afghanistan.

A similar statement was also made by participant #2 and #7, pointing out that without CCA, contingency operations are difficult in Afghanistan, because of the lack of flexibility as was clearly stated by participant #7:

> When I was there, there was no CCA going on. And I don't know if there was a moratorium on it, but there was no CCA going on, at least at Bagram…So, really, if it wasn't done with relocatable buildings, then it would have taken three to five years, a long, long time. Right. And that really wasn't an option to wait that long.

Question 3

"Does the time required to execute a CCA project discourage its use?"

Question #3 is directly related to RQ #2 and somewhat related to RQ #3, which is how CCA is being used, and unintended consequences of the CCA process. Six participants made statements regarding question #3 and all six stated that CCA took too long and forced them to seek other means to get construction done in a timely manner. Participant #3 an attorney at the corps level summarizes this sentiment, by stating:

> we try to find a way, you know, we try to make it happen, but, you know, I kept saying, "CCA." "CCA." "CCA." That was my answer. And it was always, "No." "No." "No." "We can do it this other way." "We can find a way." "It's too hard. It could take too long. Do it this other way." "O&M." "We've got the money. There's no reason we can't do it. People are gonna die."

The above statement also addresses a theme that emerged during this research, which is the fact that there are two schools of thought. One is to follow the rules and stay within regulations and the other was to do what it takes to support the mission and get the job done as illustrated below:

> There was a big division between those who – who were trying to get things done, you know, don't stop the mission, and those who wanted to do it right under the law. I was told, you know, "Marines are gonna die because you are stalling this process."

Question 4

"Have you observed any negative or positive consequences with seeking alternative funding avenues? (time/cost/performance)"

Question #4 directly addresses RQ #3, which is intended to identify consequences associated with the way CCA is approved and funded. Seven participants made fourteen statements in response to this question. Six stated negative consequences and one stated he/she

did not know because of poor communication with the war fighters. This outlier was participant #5 working in Washington D.C.

Participant #5 made a speculation with regard to communication that should be highlighted:

> You mean what effect it would have to the guy on the ground? I don't know that we sense that completely, and this is just my speculation, Captain, but maybe it's because people in the field know that the Pentagon is the Resource Provider, and so they don't want to bite the hand that feeds them. They're not gonna complain too vociferously and say, "You clowns in the Pentagon are taking forever to do this, "'cause they may be concerned that, then, we'll be not so receptive to them in the future, I'm guessing. But that's a human response. So, conversely, I would say, if they don't ever hear it and feel it, and understand the tangible impacts that time that it takes to get the projects approved has (in terms of loss of life, property, equipment), then they won't ever have any sense of urgency to expedite it.

This point made by participant #5 addresses, in part, my motivation for this research, which is to create a sense of urgency in fixing this issue. Identifying the tangible impact is the intent of question #4, which I will now list the negative effect stated by the other six participants. There was a variety of impacts sighted such as cost, ADA violations, health, safety, force protection, and ability to support the mission. Participant #3 sighted an example relating to heath, which was a theme among participants working at the Corps level:

> In 2004 they were trying to put up incinerators all over because we had these burn pits and it's terrible for the health of the personnel working there. And it was a ADA violation, and it got held up. And it was held up – I was there in '07 and it was still held up. So the result is all these people are breathing in this burn pit smoke we were trying, you know, to implement some sort of environmental regulation to keep the troops safe.

This same issue was sighted by participant #4, the senior O-6:

> As you recall in several of the bases had serious incinerator, burn pit issues, very serious, especially some of the towers that smoke would pass by and it caused some serious problems.

Question 5

"What is your opinion of the MILCON threshold limit?"

This question searches for a possible solution that I identified when I started this research, as the minor construction limit was a common complaint from troops returning from theater. Seven participants commented on this with the same response, that the $750,000 limit for minor construction is too low. Many of the suggested solutions in question #8 requested that it be raised. Department of Defense personnel involved in the CCA process shares this opinion as participant #5 and #6 are currently striving to make changes to this:

> Now there's a great topic. [Chuckle] Oh, my. CENTCOM has written a legislative proposal. It is at OSD Office of Legislative Counsel, that's OSD/OLC, it is there right now. It's proposal number 65 for inclusion in the FY '11 NDAA, which will be developed this summer, and hopefully passed in the fall – October or November, something like that. So, CENTCOM is trying to increase it from 750K to 3 million for minor construction, using O&M funds. Yes, but the CENTCOM proposal goes from 750K to 3 million – that's – they've made it very clear it's in the proposal that it's for contingency areas only.

Question 6

"What are the alternatives to seeking CCA and/or MILCON approval, in order to get a project completed?"

Question #6 is related to RQ #3 and indirectly related to RQ #2. This question is intended to identify the cause of the consequences with the intention of making a clearly identifiable connection between the CCA process and consequences. It is indirectly related to RQ #2 in that CCA is a process by which large scale contingency construction can legally be carried out. This is identifying both legal and illegal means that may or may not be the most appropriate. Several alternatives were identified such as project splitting, RLBs (relocatable buildings), LOGCAP, troop labor and using personal property (which doesn't count against the $750,000 limit) such as HESCOs

The alternatives listed are tools used by troops in circumvent using CCA or MILCON funding. This is primarily because these forms of construction can be paid for with O&M funds

rather those slower CCA and MILCON funds. It is important to point out, CCA is paid for with O&M funds, but because the approval and appropriation is different it effects the time required to start construction. Participant #2, #3 and #4 (respectively) provides some insight into the rational of seeking alternatives:

> So what we would do was when we had big projects coming up, we would have a meeting with the lawyers, the lawyer, the G8 or the resources. We would have the 4 would be in there, and let's see the 3. So these were the voting members on the JFUB. And so we would present, "Here's the project that we want to get. And this is how we are going to divide it up." The perimeter is project one. The gates is two, so on and so on and so on. And we were able to get it where each project was separate by itself and didn't rely on the other ones essentially to make it complete and useable.

> HESCO barriers being used. they would classify HESCOs as personal property and therefore you just throw them up any and everywhere and you make buildings out them.

> In OF2 in – we did in fact use a KBR and a lot of LOGCAP contracts in order to – for them to provide us a service. So in other words if we wanted food to be served to us and it required a building of a $5 million DEFAC, we said hey, go for it. You're simply providing us with a service. Go spend the money. there were projects that were done that way in the water system –In fact, the projects that were in a deficiency act violations were in fact exactly that.

Question 7

"How long does CCA take to get approved?"

Question #7 provides insight into RQ #2, describing how long the CCA process takes. It is also the mechanism, which initiates many of the consequences referenced in RQ #3.

Four participants made statements estimating the average length of time CCA takes with the longest being nine months and the shortest being five months. The two participants that stated nine months were both Army O-6s in Iraq at the Corps level and the shorts estimate of five months were from the Pentagon staff. It is also important to point out that on rare occasions projects were fast tracked and took as few as 21 days. This reveals that the ability does exist to accelerate the process, as stated by participant #4:

So it was taking 6 to 9 months. I will tell you that we had one project approved in 21 days. Can't remember which one it was but I know the reason we got it done is because when it was brought up to us. I wish I could remember the project, but we – I quickly went to MNF-I and they got it to General Petraeus who happened to be coming back to the United States. He personally briefed that to the Secretary of Defense and to Congress and it was immediately approved.

Question 8

"Do you have any solutions you would recommend regarding contingency construction?"

Question #8 is not really related to any particular RQ and was not part of my original protocol as I thought it would be a bit too ambitious to try to solve this massively complex problem with one exploratory thesis effort. Participants naturally wanted to provide solutions based on the course of questioning, so I thought it would be appropriate to document these suggestions as well as solicit input from other participant, so I added it to my protocol half way through my data collection process.

Suggestions to fix the problem are listed below

1. Increase CCA funding appropriation
2. Increase the minor construction limit of $750,000
3. Better communicate with Congress
4. Decrease CCA approval & funding time
5. Get the right people involved in the process
6. Improve cooperation between agencies
7. Clarify the definition of temporary construction
8. Better follow up by congressman
9. Lower approval authority
    a. Delegate approval authority and congressional notification to Combatant Commander

b. Give the Secretary of Defense the authority to approve and fund CCA projects

10. Reprogram MILCON fund

11. Use a area cost factor for minor construction limits

12. Create contingency regulations with more flexibility

One suggestion that I would recommend in addition to the above listed is to adjust the minor construction limit to keep up with inflation with either the Consumer Price Index or Producer Price Index. This would prevent the periodic battle to raise it incrementally as we have seen it go from $300,000 to $500,000 and $750,000 over the past few decades.

Hypothesis

I hypothesized, based on AST that "a problem that plagues the CCA process is that allocative resources and authoritative resources are not aligned." Throughout my research, few participants were able to offer insight on this issue. One participant was able to offer a refutation to this hypothesis and the dialog is provided below.

> *Interviewer:* Yes, sir, and I have another question to follow-up on that, and that is, since there's been this shift from funding CCA through the supplemental to appropriation. How has that affected has that accelerated or shortened the time it takes to actually approve and fund these projects, or what's been the effect of that? *Participant #5*: I don't think so, and the reason is that for Air Force purposes, ACC has been – they've been very accommodating. Rather than wait for the supplemental they passed in May here, they would go ahead and cash flow CCA projects, as soon as those projects were approved, knowing that later ACC would be reimbursed via the supplemental bill. So, ACC just took funds out of hide and cash flowed the CCA projects, and then they reimbursed later. They've been really supportive about that. There has never been an instance where ACC said, "We will not fund those CCA projects." Instead, they've always been very supportive of it.

While this data does not support the view that CCA is inhibited by funding through the supplemental, it does exhibit AST in that the budgeting process has adapted to meet contingency construction needs. In that regard, resources appear to be in conflict.

Summary

This chapter has provided an outline of the method I used to analyze the data collected from interviews. This section explained the method used to identify statements in the transcript and connect them with the eight questions derived from the protocol. The theme identification and theme synopsis section showed how participant's responses were used to identify trends. This section also addressed a previously stated hypothesis.

V. Conclusion

Chapter Overview

This chapter will present the culmination of this research effort. I will make a connection between both the eight questions from the protocol and three main research questions. I will also present emergent concepts that were identified as a result of this thesis effort. The chapter will end with limitations, motivation and bias and potential future research opportunities.

Research Questions

Question 1

What is the intent of CCA?

Much of the insight about the intent of CCA currently exists in relevant literature such as public law and DoD regulations. For this reason, a Grounded Theory like approach was used to provide an abstraction to support the use of data that resides in the literature. Further clarity has been gained through interviews, soliciting the perceived intent of CCA by the participants and an indication if that intent is being met.

Title 10 U.S.C. 2804 grants "the Secretary of Defense the authority to carry out a military construction project not otherwise authorized by law, if deferral of the project for inclusion in the next Military Construction Authorization Act would be inconsistent with national security or national interest." (U.S. House of Representatives, 2007) Or as the war fighter states "it was a break the glass, got to have it now type of program that, you know, I'm building something, I got – it's more than $750,000.00 and I gotta have it. And then whatever the process is up in DC … that's the theory." (participant #2) What is not clear is how long it should take? Clearly,

one can surmise from the law itself, that is should take less time then MILCON which is three to five years (Mathews, 2006). One can also reason that seven days is likely unobtainable and based on the interview data, the war fighter is not content with six to nine month lead-time. Because of this the war fighter is seeking other programming avenues.

One clear fact is that the law grants authority to the Secretary of Defense, lowering the approval authority from Congress to the Secretary of Defense. Although it is unclear if congressional, notification is truly a notification or an approval process, as congress is thoroughly scrutinizing projects. Many participants recommend lowering this authority level even further. Specifically, two Pentagon level participants stated, "the most dramatic proposal that came out of that Winchester Conference was that we see if we can delegate approval authority to the COCOM." (Participant #5) "So, in that case, then you delegate the authority to the Combatant Commander. You provide him with the ability to provide congressional notification himself, or herself, or their selves. And then they have fixed resources through the service components in the way that they POM, and then he were able to reach out and cap those resources as needed." (Participant #6)

It is also clear that CCA is intended to support MILCON level projects. It is clear from the interviews that MILCON level construction is taking place outside the processes of CCA, through project splitting, LOGCAP and personal property to name a few. Therefore, in that regard CCA is clearly not meeting its intent. Although, in a more technical evaluation one may state that projects programmed through CCA are being approved at a lower level and they are taking less time them MILCON. Under those criteria, it could be described as meeting its intent.

Question 2

How is CCA being executed?

This is clearly an exploratory question that has gained resolution throughout the data collection process. Rather then restating what has previously been mentioned, I provide the below value stream map to give additional understanding. It is also important to note that this map represents the understanding of the participants involved in the research.

Depicted below is the process used for approving, validating and funding projects. The colors indicate the time required to process a project depending on the type of funds being used. It is important to note that this value stream map starts at the AFCENT level and lower level process exist before it arrives at this level. It should also be noted that more detailed and complex process exist within each approval level as depicted in the second value stream map outlining the through processes at the Pentagon level.

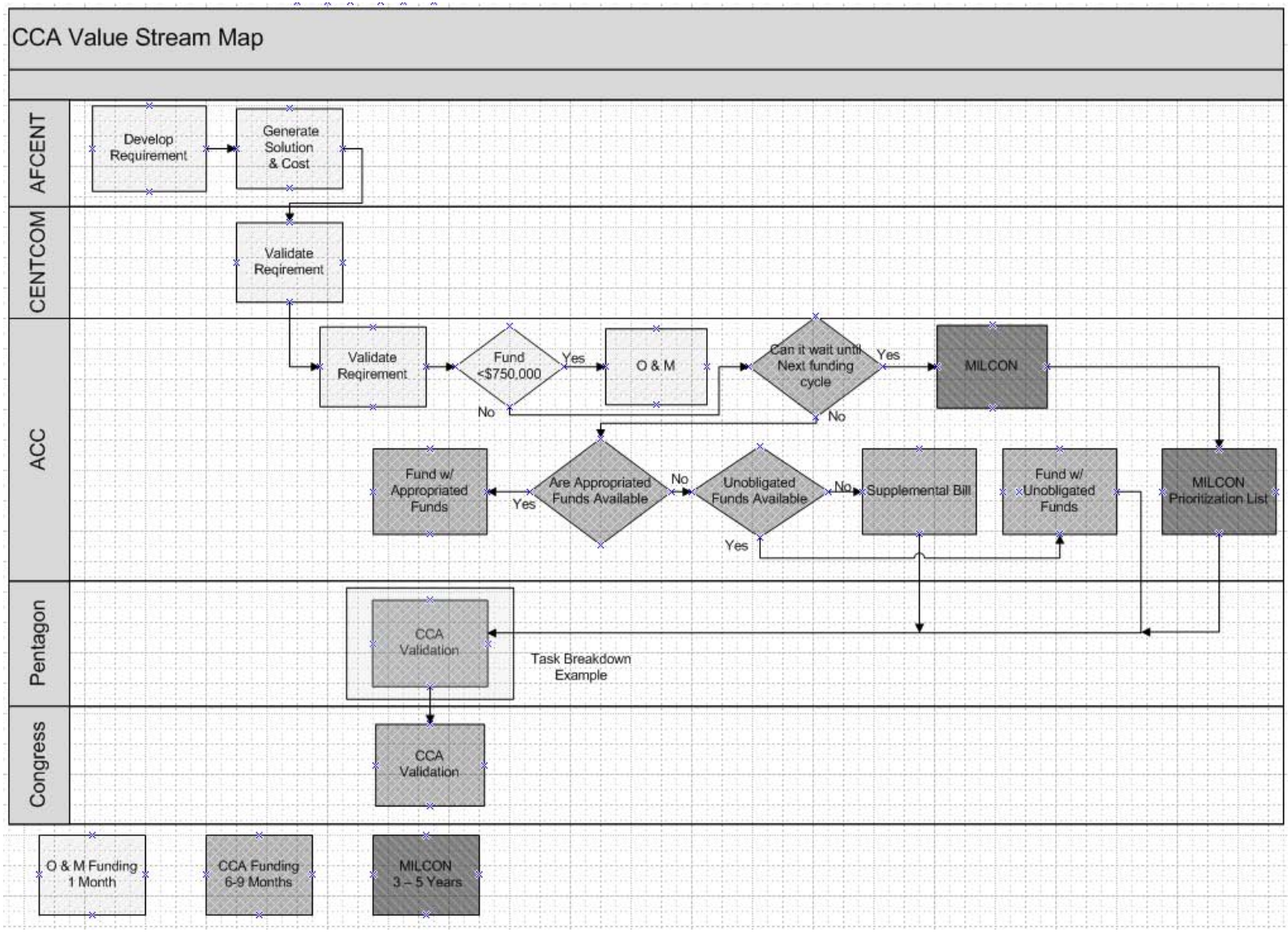

Figure 5: CCA Value Stream Map

The below Pentagon level process flow shows the more detailed approval process at the Pentagon level to include the average time for processing at each level. The summation of processing time at this level is 60 working days. This does not account for weekends and holidays. Lower level processes in the AOR would reflect more accurately as those functions generally operate seven days a week.

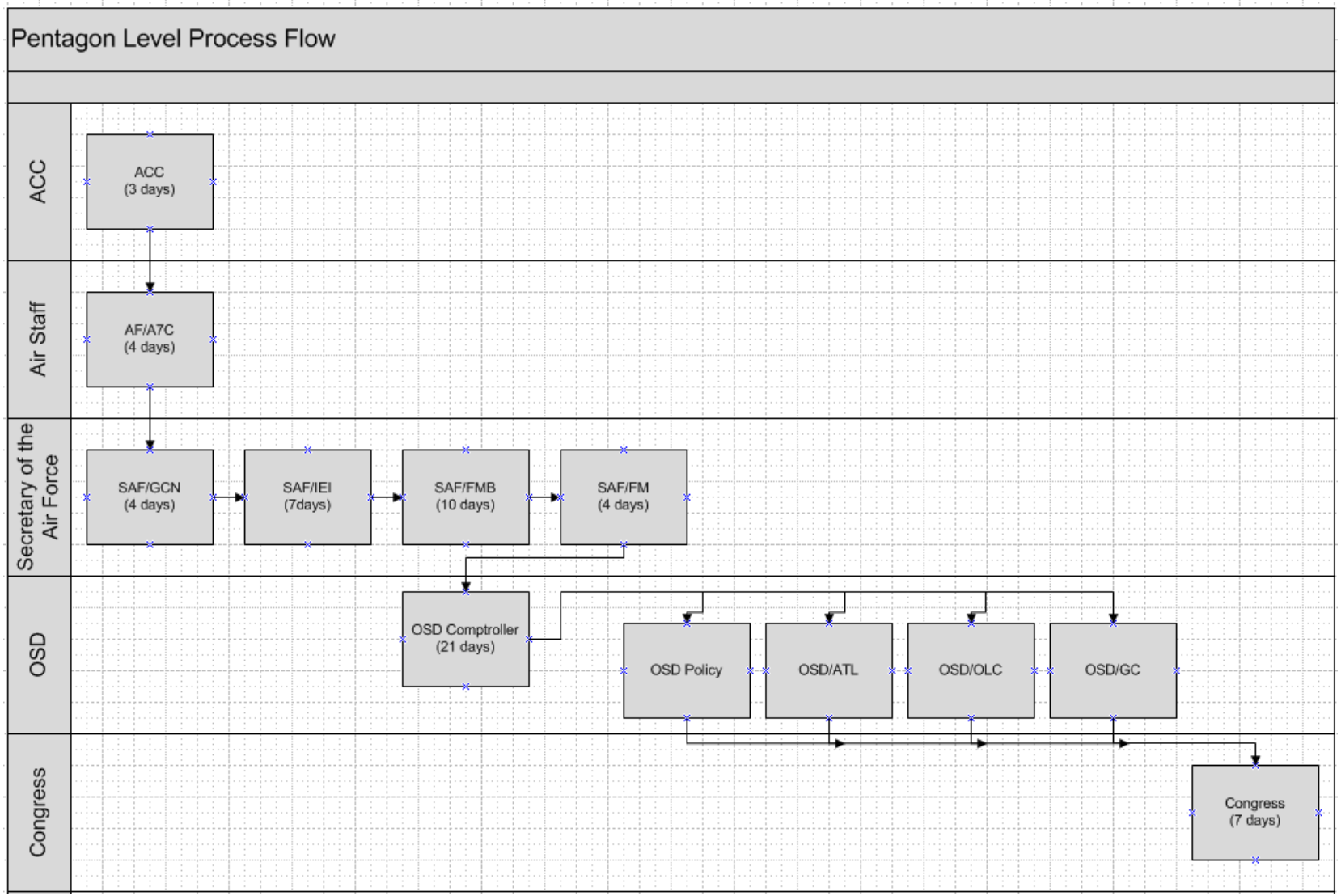

Figure 6: Pentagon Level Process Flow

The process maps are provided as they can be used as a foundation to evaluate and streamline the approval process in future research. The literature review has also provided some insight into CCA execution. It is apparent, upon completion of the literature review and interviews that CCA is not functioning as it was intended. Furthermore, CCA is stifled by the uncertainty associated with contingency-based economical analysis (Belasco & Else, 2005). Further influencing the execution of CCA is the political sensitivities associated with the construction of permanent infrastructure for basing in Iraq (Hughes, 2005).

Orlikowski uses the concept of *temporal structure* which can be useful in understanding why agents may resort to seeking alterative funding avenues in order to execute contingency construction. Agents use *temporal structuring* in order to produce specified parameters of acceptable conduct (Orlikowski & Yates, 2002). Clock time and event time (*chronos and kairos*) can be a catalyst for *temporal structuring* (Orlikowski & Yates, 2002). The role of a programmer or commander may create and shape the temporal conditions, because of economic or institutional pressure coupled with structural conditions outside their immediate control (Orlikowski & Yates, 2002). The agent creates workarounds and adaptations to speed up or manage time more effectively without fundamentally changing the old structure, "even while still believing they are enacting the old structure" (Orlikowski & Yates, 2002). This theory can explain why agents in the process may manipulate the system in order to speedup the approval process by seeking approval through minor construction O&M funding.

Question 3

What are the unintended consequences of the CCA process?

This question was directly addressed in protocol question #4 and generated the following negative consequences: cost, ADA violations, health, safety, force protection, and ability to support the mission.

Although, insight has been gained through the literature summarized in chapter II, the interview protocol added further clarity to the consequences of the CCA process. It is apparent, upon completion of the literature review and interviews that CCA is not functioning as it was intended. I suspect as a result of the alteration of CCA execution and funding, consequences such as; project redesign, projects splitting, LOGCAP, and others have been leveraged in order to support contingency operation. As we have just reviewed the consequences of the CCA process, we will now look to structuration to further guide our understanding of the results.

Structuration is defined as "the structuring of social relations across time and space, in virtue of the duality of structure" (Giddens, 1984). In evaluating the consequences of the CCA process, it is useful to consider the concept of duality of structure, in that the "essential recursiveness of social life, as constituted in social practices: structure is both medium and outcome of the reproduction of practice" (Giddens, 1979, p.5). This duality of structure may help explain the use of LOGCAP to construct MILCON level facilities with construction only service contracts in order to circumvent CCA (Hughes, 2005). This contracting tool provided practitioners a loophole or structure in contract law, reflecting the recursive duality of programming regulatory structure. This recursive transformation exemplifies the fact that "structure is both medium and outcome of the reproduction of practice." (Giddens, 1979, p.5)

These construction outcomes (programming structure, for example) are *dangerous* in that they are temporary, emergent, and rapidly constructed assemblages, that are vulnerable to breakdown and failure (Orlikowski, 2006). This concept of dangerous outcome vulnerable to breakdown addresses the emergent outcomes of cost, schedule, performance, safety and mission salience of construction projects, which are artifacts of project splitting (for example) as peacetime programming structures are temporarily transported and rapidly constructed to be used in a contingency environment. The interview protocol specifically sought to confirm practices such as LOGCAP construction, project splitting, project redesign, and use of relocatable buildings in order to clarify consequences CCA execution. The interview protocol also sought to unearth evidence that there is a problem with CCA execution as it is being avoided by means of evolution in duality of programming structure and temporal structuring. One of the participant suggestions was to create a separate set of contingency regulations, which is complementary of theory, removing the transportation of programming structure allowing contingency regulation to mature in a contingency environment. Additional suggestion can be found in the emergent concepts section of this chapter, revealed during the interview process.

Hypothesis

I did not find support from my hypothesis that "the reason CCA was taking so long is that is was funded through the supplemental." I do not believe this is a contributing factor, based of the data collected. Research indicates that one Major Command, ACC, flows funding for CCA, taking in out of hide through re-budgeting. (Participant #5) When I was in Iraq, staff personnel, including myself, were told and believed that CCA projects would have to wait until the supplemental bill was passed before funds would flow to CCA projects. This is apparently not the case. Therefore, even though authoritative and allocative resources are not aligned, in some

instances, this can be overcome thought re-budgeting and therefore not delay a project to the degree previously thought.

Emergent Concepts

During the course of this research, conversations with participants reveal concepts that did not directly address the questions of this research, but provide meaningful insight into the topic of contingency construction in general. When these emergent concepts surfaced, I felt it was important to document them.

One of the issues cited was the political sensitivity with long-term presence, which I believe affects two areas. One is the interpretation of temporary construction, which is being operatinalized as a ban on CMU (cited by many participants). The second is an undesirable perception of a long-term presence by the Iraqi, Afghani and American people.

Another issue was raised regarding leadership pressuring subordinates to find alternative solutions such as project splitting, RLBs and so forth. Compounding the problem, participants also felt that JAGs where not equipped or willing to help provide legal solutions to contingency construction problems. Related to the last point, some of the lawyers felt unequipped to perform their job as well stating that they were not familiar with fiscal law.

Participants also stated that there was a lack of personnel resources to follow up, track and inspect projects. They believed it contributed to some of the ADA violations, because of the lack of dedicated personnel to track projects. Also, because CCA takes so long, requirements change by the time projects are approved and the original project may not meet the current mission requirements, as contingency operations are an ever-changing environment.

I brought up the next issue during an interview, which relates to the use of troop labor. The Army reduced their engineering capability in the past as the Air Force is currently doing.

The comparison of capability between military and contractors is often the center of discussion. Troop labor is not counted against the minor construction limit; this needs to be considered, because of the flexibility it provides. On more than one-occasion, contractors have refused to perform, because of the risks of combat operations. Another consideration is that military personnel are not constrained by a preexisting contracts and can provide commanders additional flexibility in combat operations as illustrated in the below conversation:

> *Interviewer:* Sir, I think that's an interesting point that you brought up, and that is using troop labor as a means by which we can somewhat circumvent those funding thresholds because the labor is not counted against the construction cost. And as I understand it, and you please fill me in, 'cause I'm sure I'm not as familiar with it as you are, but it's my understanding that the Army got rid of a lot of their construction capabilities I think in the '90s, possibly. And part of that analysis involved saying that contractors can do everything that active duty military can do, or Reserves. But in fact, that might not be the case in a contingency environment, because contractors, all their labor costs go against the construction limit. But troop labor does not. So, it seems like that may not have been an accurate assessment back when they did that analysis. *Participant #8:* That is a true statement....because of that fact, the use of troops...should be the first – because of all the other restrictions because of contingency and military construction restrictions, ... to expedite those projects, and that may or may not affect the commander's flexibility in the plan.

When considering these consequences it is important to keep in mind the limitations, motivation and bias of this research.

Limitations

This research was conducted with the understanding that this would be a qualitative exploratory study. For that reason, the sample size is modest with nine participants. These participants shared their experiences with contingency construction in Iraq, Afghanistan and support from Washington D.C. Because this was a small sample, considering the problem space, one may have difficulty gaining confidence about making inferences about the entire problem space. This study drew upon the experience of nine participants therefore may not provide a

precise representation of the entire problem space, but rather a rough sketch. This research identified increased cost as a consequence, of the current CCA process. If the CCA process was to incorporate all the suggested solutions, one cannot confidently predict the impact on cost or other factors for that matter. Furthermore, I think it is fair to consider the motivation and bias of this study when considering limitations.

Motivation and Bias

I was motivated to study this issue after my experiences in Iraq, as expressed in Chapter one. I started with a preconceived notion that a problem exists and I wanted to identify and help solve it. I constructed this study to uncover those issues. Therefore, this was not a constructivist epistemological study, but rather action research. Based on documented memorandums between General David Petraeus and the Deputy Secretary of Defense William Lynn I felt justified in making that assumption that a problem existed.

Future Research

This research was intended to provide clarity into the CCA issue as well as action research to motivate leadership to generate change in the CCA approval and funding process. I hope this exploratory research has laid a foundation for further research to evaluate and correct the CCA approval and funding process. I also hope that future research will be done in the area of fiscal law, both in clarification of definitions and intent. It would also be appropriate to quantitatively evaluate the impact of the CCA process, in order to bring clarity to a more economical solution to contingency construction.

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Appendix

Analysis Tables for the Eight Protocol Questions

Question 1

"How do you think the peacetime construction regulatory structure is performing in the contingency environments?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
Well I think it's the scale of the contingency environment. You're building cities from the ground up with no infrastructure. And we rarely do that stateside. I mean, if we do it, the Congress knows about it and they budget for it. And over there we are doing more than that. I mean, we are – we are building the infrastructure the buildings and everything else. And, you know, nobody contemplates the true expense of all this. And I'm just – I was just worried that we were circumventing the intent of Congress constantly.	Not working (Funding)	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq	
there's two problems. One, there is a bureaucratic process that has dollar limits on it. And two, it truly only authorizes what is called temporary construction.	Not working (Funding, Process, definitional)	4	O-6	34	Engineer	Corps	Army	Iraq	Process (O-6/ Engineer/ Corps/ Army/ Iraq)
the system is not designed for expeditionary operations. Military construction is a very long and complicated process that requires Congress approval.And a lot of the regulations that we have to abide by are peace time regulations. So, is it accurate in saying that you believe they're not performing in a contingency environment?That is correct. When we mobilize and we go overseas, and we work overseas in a project in a contingency environment, all these restrictions that are peace time restrictions do not help us at all.	Not Working (Process, Time, complicated, congressional approval)	8	O-6	28	Engineer	Corps	Army	Iraq	Process (O-6/ Engineer/ Corps/ Army/ Iraq)
I know we're making extensive use of that. Like I say, about 300 projects a year, maybe worth 220, 230 million, something like that. So, point being that we know the authority we have is a useful tool, because it's being used extensively. We're putting up hundreds of – well, you know, but hundreds of buildings over there – maybe over the course of the 6 or 7 years, maybe – I don't know, up to 2,000 of these little buildings. And we need 'em all, obviously. So, that's a tool that's definitely being used. Obviously, everybody would like to have a higher authority than 750K, but it is being used.	Useful	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Outlier (DC/ Civil Service/ Pentagon)

Table 2: Analysis of Question 1

Question 2

"Do you think the CCA and MILCON regulatory structure is meeting its intent?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
the way CCA was always explained to me was it was a break the glass, got to have it now type of program that, you know, the I'm building something, I got – it's more than $750,000.00 and I gotta have it. And then whatever the process is up in DC to get it_____. And in theory – that's the theory, in practice I never saw it happen. My predecessor briefed me the exactly same thing that I'm telling you now is that you cannot rely on a CCA turning quickly.	No (Time)	2	O-5	19	Army Officer	Corps	Army	Afghanistan	
CCA in that it did not work for us.	No	2	O-5	19	Army Officer	Corps	Army	Afghanistan	
CCA doesn't work and is not timely enough for you.	No (Time)	2	O-5	19	Army Officer	Corps	Army	Afghanistan	
Yes, and that was the complaint. "Oh, it takes too long to get that." CCA was something that, if it was available then it seemed like the Secretary of the Army or someone could approve it. But it was never available.	No (Time)	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq	
– it's hard to say an average but I would say a minimum 6 to 9 months where the goal as I understand the intent of the law, it's only supposed to take 30 to 45 days.	No (Time)	4	O-6	34	Engineer	Corps	Army	Iraq	
CCA is really designed to grant authority for projects for where we have no intent for long-term occupation of an area. Where in Afghanistan, that is in fact the plan and that's prohibited a lot of it in Afghanistan.	No (only for no intention for long term presence, prohibited in Afghanistan)	4	O-6	34	Engineer	Corps	Army	Iraq	Insightful Response, Long Term Presence Afghanistan (34)
– in terms of quick, in terms of rapid approval – probably not. We need to streamline. We know we have to. But the ultimate objective of providing facilities, we're very pleased that we've got CCA as a tool.	No (Time), Yes Useful	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Outlier (DC/ Civil Service/ Pentagon)

Table 3: Analysis of Question 2

Question 3

"Does the time required to execute a CCA project discourage its use?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
the base just exploded population-wise. Let's see four – about four times the enduring population of the – is what we were surging to. So the only way to get there was to do the O&M funding – the quick and so forth, and it wasn't quick by any stretch of means. Okay. So the primary motivator for going with the relocatable buildings was the timeframe to get that down. Yes. our only option was to do relocatable buildings.	Yes	1	O-6	24	Support Officer	Group	USAF	Afghanistan	Yes (all)
My predecessor briefed me the exactly same thing that I'm telling you now is that you cannot rely on a CCA turning quickly.	Yes	2	O-5	19	Army Officer	Corps	Army	Afghanistan	Yes (all)
Yes, and that was the complaint. "Oh, it takes too long to get that." CCA was something that, if it was available then it seemed like the Secretary of the Army or someone could approve it. But it was never available.	Yes	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq	Yes (all)
Right. And we try to find a way, you know, we try to make it happen, but, you know, I kept saying, "CCA." "CCA." "CCA." That was my answer. And it was always, "No." "No." "No." "We can do it this other way." "We can find a way." "It's too hard. It could take too long. Do it this other way." "O&M." "We've got the money. There's not reason we can't do it. People are gonna die."	Yes	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq	Yes (all)
bureaucratic process at least at that time that was a bit burdensome.	Yes	4	O-6	34	Engineer	Corps	Army	Iraq	Yes (all)
So, if your premise is, going in, that the Department of Defense needs to find a more expeditious way of meeting our war fighter's needs and the dynamic, ever-changing requirements on the ground, I would say you have a very good premise going in, just based on ******** spiel here that he's given you in terms of what it takes to get one of these things approved.	Yes	6	O-4	11	Civil Engineer	Pentagon	USAF	DC	Yes (all)
CCA affects the process, but it is still not as fast as a operational contingency requires.	Yes	8	O-6	28	Engineer	Corps	Army	Iraq	Yes (all)

Table 4: Analysis of Question 3

Question 4

"Have you observed any negative or positive consequences with seeking alternative funding avenues? (time/ cost/ performance)"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
And since they were relocatable, nobody really saw problems until the potential anti-deficiency issue cropped up	Negative (ADA)	1	O-6	24	Support Officer	Group	USAF	Afghanistan	
you know, basically built close to the limit, again, to give us more space. It probably didn't meet the requirement (quote/unquote),It didn't meet the needs whatsoever. I mean, as far as it couldn't hold probably a tenth of the people that need to process in and out of the PAX terminal and have good control of the people for accountability of who was going where and coming in.	Negative ("It didn't meet the needs whatsoever")	7	O-6	24	Civil Engineer	Group	USAF	Afghanistan	
the other one that affected operations was the construction of internment facilities. Cause you know you need the internment facilities before you start capturing people.	Negative (Mission)	8	O-6	28	Engineer	Corps	Army	Iraq	
Core of Engineers never when back to check on the lawyers to see whether the additions onto this project, which apparently were just very bare minimum when it went through these things augmented in a way that was, you know, a violation of the ADA. And eventually, you know, I said, "Yeah, this is a ADA violation, I think."	Negative (ADA)	3	O-4	12	Attorney	Embassy /Corps	USAF	Afghanistan/ Iraq	
Brick and morter Yes, less expensive	Negative (Cost)	1	O-6	24	Support Officer	Group	USAF	Afghanistan	Cost (O-5/6)
we have to use HESCO barriers for everything. So essentially what happens is we use HESCOs to build a battalion size FOB which are very expensive. Gravel was very – everything is expensive in Afghanistan.	Negative (Cost)	2	O-5	19	Army Officer	Corps	Army	Afghanistan	Cost (O-5/6)
you spent about, you know, about $10.000 worth of man-hours trying to get it legal and sufficient.	Negative (Cost)	2	O-5	19	Army Officer	Corps	Army	Afghanistan	Cost (O-5/6)
The "just good enough" generated additional problems. Number one it frequently added to the cost or obviously, the intent of temporary construction is to do exactly the opposite. It is actually cheaper and faster to build CMU.	Negative (Cost)	4	O-6	34	Engineer	Corps	Army	Iraq	Cost (O-5/6)

Table 5: Analysis of Question 4

Question 4 (Continued)
"Have you observed any negative or positive consequences with seeking alternative funding avenues? (time/ cost/ performance)"

Response	Remarks	ID	Rank	Yr.	Occupation	Level	Service	AOR	Theme
LOGCAP In fact, the projects that were in a deficiency act violations were in fact exactly that. I don't recall all of them but I cannot throw the water project out. You probably saw it as you pass, there were 3 or 4 water tanks that were – it was at a 95% completion. There was a sewage plant that was located nearby that was a stop project that was at about 50% completion. All the equipment was on the ground. It was laying there basically. They were initially allowed back in OF1 and 2 but they were stopped at the beginning of what we'd call OF3. Those were – any projects ongoing like that were stopped.	Negative (ADA,Cost)	4	O-6	34	Engineer	Corps	Army	Iraq	Cost (O-5/6)
remember IG came over and they were looking of some of the pictures that we had of the HESCO towers, and they looked like they were about to just completely collapse. And they said, "Get rid of those things and build real towers."	Negative (Safety)	3	O-4	12	Attorney	Embassy/Corps	USAF	Afghanistan/ Iraq	Health and/or Safety (Corp)
in 2004 they were trying to put up incinerators all over because we had these burns and it's terrible for the health of the personnel working there. And it was a ADA violation, and it got held up. And it was held up – I was there in '07 and it was still held up. So the result is all these people are breathing in this burn pit smoke we were trying, you know, to implement some sort of environmental regulation to keep the troops safe	Negative (ADA,Health,Safe)	3	O-4	12	Attorney	Embassy/Corps	USAF	Afghanistan/ Iraq	Health and/or Safety (Corp)

Table 6: Analysis of Question 4 (continued)

Question 4 (Continued)

"Have you observed any negative or positive consequences with seeking alternative funding avenues? (time/cost/performance)"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
CMU, and you know this, it's obviously a far better force protection measure than a CHU. That's a problem with the law and that if anything needs to be changed first because the latter has a direct effect on force protection and also has incressed casualties in Iraq unnecessarily by forcing us to go the temporary construction route in Iraq.There've been a number of people who have been injured in trailers do to rockets and mortars where if they had been in a concrete unit that would not have occurred. long-term maintenance of those facilities and increased casualties that occur because of it.	Negative (Cost, Safety/Force Protection, lose of life)	4	O-6	34	Engineer	Corps	Army	Iraq	Health and/or Safety (Corp), Force Protection (34)
As you recall in several of the bases had serious incinerator, burn pit issues, very serious, especially some of the towers that smoke would pass by and it caused some serious problems.	Negative (ADA,Health)	4	O-6	34	Engineer	Corps	Army	Iraq	Health and/or Safety (Corp)
Maybe not, and I'm gonna guess it's because – well, see – I guess by implication you mean what effect it would have to the guy on the ground?I don't know that we sense that completely, and this is just my speculation, Captain, but maybe it's because people in the field know that the Pentagon is the Resource Provider, and so they don't want to bite the hand that feeds them.They're not gonna complain too vociferously and say, "You clowns in the Pentagon are taking forever to do this, "'cause they may be concerned that, then, we'll be not so receptive to them in the future, I'm guessing.But that's a human response. So, conversely, I would say, if they don't ever hear it and feel it, and understand the tangible impacts that time that it takes to get the projects approved has (in terms of loss of life, property, equipment), then they won't ever have any sense of urgency to expedite it.	Don't Know (Poor Communication with troops in field)	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Outlier Don't Know & Poor Communications (Pentagon/ Civil Service/ DC)
That would not be contested here, but it does raise a point. The DD1391 has to state that we are performing minimum level of construction. And if that means CMU, okay. OSD Comptroller will not turn down a project that cites use of CMU. However, it's incumbent upon us to state in the 1391 that use of CMU is the minimum level of construction that's accessible.	Don't Know (Poor Comm w/ troops in field; Can CMU be used? Conflicting understanding)	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Outlier Don't Know & Poor Communications (Pentagon/ Civil Service/ DC)

Table 7: Analysis of Question 4 (continued)

Question 5

"What is your opinion of the MILCON threshold limit?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
, the Chief of Staff, the Air Force Civil Engineer – when folks would come into Bagram, we were very consistent in our message that the funding limitations – the MILCON funding limitations at 750 and 1.5 need to be doubled at least in today's environment. Afghanistan is at the end of the world's longest supply chain. And to have notions that we can build under those parameters for those kinds of costs is just – it's not reality in today. It needs to be something different for AOR.	Too Low	1	O-6	24	Support Officer	Group	USAF	Afghanistan	Too Low (all)
all the projects if you took them and if you took them in whole, they're all over the $750,000.00 limit, everything. I mean even if I built a facility for a 30 man platoon, it would be over $750,000 because once you put in – again the HESCOs are so expensive, all the labor, you know, electrical grid. It's just insane.	Too Low	2	O-5	19	Army Officer	Corps	Army	Afghanistan	Too Low (all)
, the MILCON limits are outdated.	Too Low	2	O-5	19	Army Officer	Corps	Army	Afghanistan	Too Low (all)
quite frankly the MILCON levels has to go up in the contingency environment.	Too Low	2	O-5	19	Army Officer	Corps	Army	Afghanistan	Too Low (all)
somebody's got to realize that these things are costing more, and we need to raise the limit from 750 or higher or else just notify Congress that this is just not gonna work.	Too Low	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq	Too Low (all)
So the total authority dollars is too low	Too Low	4	O-6	34	Engineer	Corps	Army	Iraq	Too Low (all)
Now there's a great topic. [Chuckle] Oh, my. CENTCOM has written a legislative proposal. It is that OSD Office of Legislative Counsel, that's OSD/OLC, it is there right now. It's proposal number 65 for inclusion in the FY '11 NDAA, which will be developed this summer, and hopefully passed in the fall – October or November, something like that.So, CENTCOM is trying to increase it from 750K to 3 million for minor construction, using O&M funds.Yes, but the CENTCOM proposal goes from 750K to 3 million – that's – they've made it very clear it's in the proposal that it's for contingency areas only.	Too Low	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Too Low (all)
750,000, is that restricting our efforts in construction, or do you think that should be adjusted at all?Yeah, I would say it is. But I'm not sure what the right answer is. How much do you make, and do you make it – do you double it and make it 1.5 mil, or you just bump it up another $250,000.00 and make it 1 million just for those normal things versus the – you know, the other ones that are life, safety, etc.,	Too Low	7	O-6	24	Civil Engineer	Group	USAF	Afghanistan	Too Low (all)
not only is the notification process is cumbersome, but the limits are too low.and the limit is $750,000.00, that is a very restricting fact, that we have being the law that makes it totally and completely unworkable.	Too Low	8	O-6	28	Engineer	Corps	Army	Iraq	Too Low (all)

Table 8: Analysis of Question 5

Question 6

"What are the alternatives to seeking CCA and/or MILCON approval, in order to get a project completed?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR
Because, you know, you could essentially chop the number of buildings down or program is such that from the Air Force and Army perspective at the time that fit that kind of funding.	Project Splitting	1	O-6	24	Support Officer	Group	USAF	Afghanistan
And since they were relocatable, nobody really saw problems until the potential anti-deficiency issue cropped up	RLBs	1	O-6	24	Support Officer	Group	USAF	Afghanistan
So what we wound up doing is adding bits and pieces, keeping it under the 750. RED HORSE would do a piece on one part of the ramp, and then civil engineers would do another. We'd do a smaller contract. And that's how we were able to keep up with the rapid expansion with the number of aircraft that came in as well.	Project Splitting	1	O-6	24	Support Officer	Group	USAF	Afghanistan
So what we would do was when we had big projects coming up, we would have a meeting with the lawyers, the lawyer, the G8 or the _____ resources. We would have the 4 would be in there, and let's see the 3. So these were the voting members on the JFUB. And so we would present, "Here's the project that we want to get. And this is how we are going to divide it up." The perimeter is project one. The gates, perimeter two, so on and so on and so on. And we were able to get it where it project was separate and above itself and didn't rely on the other ones essentially to make it complete and useable.	Project Splitting	2	O-5	19	Army Officer	Corps	Army	Afghanistan
Core of Engineers never whet back to check on the lawyers to see whether the additions onto this project, which apparently were just very bare minimum when it went through these things augmented in a way that was, you know, a violation of the ADA. And eventually, you know, I said, "Yeah, this is a ADA violation, I think."	Project Splitting	3	O-4	12	Attorney	Embassy /Corps	USAF	Afghanistan/ Iraq
15 projects, each worth less than $750,000.00 and each were individual, you know – I can't remember what the term was – project?each one of them was in and of themselves complete and useable, but you would never in a million years have a complete and useable dorm out in the middle of Afghanistan without the other projects surrounding it.spirit of the law was not met.	Project Splitting	3	O-4	12	Attorney	Embassy /Corps	USAF	Afghanistan/ Iraq

Table 9: Analysis of Question 6

Question 6 (Continued)
"What are the alternatives to seeking CCA and/or MILCON approval, in order to get a project completed?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR
I got wind of these wells and how they were getting built. It seemed that they had the Air Force folks, maybe, were coming in to do one leg of it, and then they would have, maybe, the Seabees do another leg, and they would contract out a part of it. dug by the Air Force for a certain cost and then capped. And they would dig all these wells all over Afghanistan and cap them. And then when they were ready to, you know – what's the word? You know, finish them off or keep them going, they would get some other company in there to do that or the seabees or somebody. And they would come in and they would build the hut that goes near it.	Project Splitting	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq
– the jail that they just built there, they were – it was amazing they were fitting under the rubric of all these terms. you know, it's not complete – it's not necessary for the complete and usableness of this facility to have the vocational wing, you know.	Project Splitting	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq
So you could put a lot of trailers in with minimal MILCON dollars involved. Or if you're not gonna exceed the MILCON threshold, I'm sorry. Where if you build CMUs, you will quickly reach those points.	RLBs	4	O-6	34	Engineer	Corps	Army	Iraq
. However, I do know personally because I had been there over a period of time, that there were projects where these were done later to the project where there had been no expansion incapability's but they added to the project cost that would have broken the MILCON threshold. I do know that occurs. So it was clearly a MILCON bust.	Project Splitting	4	O-6	34	Engineer	Corps	Army	Iraq
RLBs, they were using – and from off the top of my head – I think it was somewhere between 10 and $12 million project to build like 19 facilities. And the goal was to try to get this quicker Yes, sir. So, would you say your – it sounds to me like your reason for choosing relocatable buildings was that the brick and mortar buildings were for the steady-state long term, and the relocatable were so that they could be possibly redistributed throughout theater when the base did draw down?(Quote/unquote) yeah. I mean, that's – do I really believe that they'd be relocated? Probably not. I mean, 'cause – they did put a tin metal roof over – when the Army actually had a couple sets of RLBs themselves like that, except theirs were two stories, and it did have a metal roof on it, etc., too.were RLBs was to avoid the MILCON threshold? Did that play a role at all?Yeah, I would definitely say that would play a role	RLBs	7	O-6	24	Civil Engineer	Group	USAF	Afghanistan

Table 10: Analysis of Question 6 (Continued)

Question 6 (Continued)
"What are the alternatives to seeking CCA and/or MILCON approval, in order to get a project completed?"

Response	Remarks	ID	Rank	Yr.	Occupat	Level	Service	AOR	Theme
the use of relocatable buildings was one way.	RLBs	8	O-6	28	Engineer	Corps	Army	Iraq	
different construction agencies also affected. For example, if you use troops, The labor is not counted towards the construction cost.	Troop Labor	8	O-6	28	Engineer	Corps	Army	Iraq	
The big issues with that, I believe you also mentioned earlier, was project splitting. Because it's – that is, I would say – because you don't have to notify Congress and wait the required days – whether it's 10 days or – electronic notification I think is 10 or 15. Then, that is the more expedient way to do it, 'cause if you have a project that could be funded with $750,000.00, that's much faster than going through the congressional notification.But you gotta make sure that it's a complete project – you got a complete and usable facility after it's done.	Project Splitting	9	O-4	14	JAG	Joint Contracting Command	USAF	Afghanistan/ Iraq	
Okay. How about relocatable buildings? Was that one means by which you can stay under the $750,000.00 threshold?Yep, that's the one as well, because you had relocatable buildings.	RLBs	9	O-4	14	JAG	Joint Contracting Command	USAF	Afghanistan/ Iraq	
we have to use HESCO barriers for everything. So essentially what happens is we use HESCOs to build a battalion size FOB	HESCOs	2	O-5	19	Army Officer	Corps	Army	Afghanistan	HESCOs (Corps)
HESCO barriers being used. they would classify HESCOs as personal property and therefore you just throw them up any and everywhere and you make buildings out them.	HESCOs	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq	HESCOs (Corps)
In OF2 in – we did in fact use a KBR and a lot of LOGCAP contracts in order to – for them to provide us a service. So in other words if we wanted food to be served to us and it required a building of a $5 million DEFAC, we said hey, go for it. You're simply providing us with a service. Go spend the money. there were projects that were done that way in the water system –In fact, the projects that were in a deficiency act violations were in fact exactly that.	LOGCAP	4	O-6	34	Engineer	Corps	Army	Iraq	LOGCAP (34)

Table 11: Analysis of Question 6 (Continued)

Question 7

"How long does CCA take to get approved?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
CCA, The problem is the authority for that is Congress. So what you get essentially is a – you're getting basically the same type of authorities for different money, but the timeline is essentially the same.	Essentially same as MILCON	2	O-5	19	Army Officer	Corps	Army	Afghanistan	
it probably took about six months, I think – maybe a little bit less – from the time we identified these projects to getting the authorities to start building them.	6 Months	2	O-5	19	Army Officer	Corps	Army	Afghanistan	
Multiple levels of bureaucracy, each one of them went through fairly quickly but at the end of all that, there was a problem and weekends mattered, the time difference had an impact, everything caused an extra delay, a day or so. It was not unusual to get several months' delay	Several Months Delay	4	O-6	34	Engineer	Corps	Army	Iraq	
Oh, maybe I'd say like five, six months.	5 to 6 Months	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	
it's hard to say an average but I would say a minimum 6 to 9 months	6 to 9 months	4	O-6	34	Engineer	Corps	Army	Iraq	9 Months (O-6/ Corps/ Army/ Iraq)
And so it was taking 6 to 9 months. I will tell you that we had one project approved in 21 days. Can't remember which one it was but I know the reason we got it done is because when it was brought up to us. I wish I could remember the project, but we – I quickly went to MNFI and they got it to General Petraeus who happened to be coming back to the United States. He personally briefed that to the Secretary of Defense and to Congress and it was immediately approved.	6 to 9 months/ one project approved in 21 days	4	O-6	34	Engineer	Corps	Army	Iraq	9 Months (O-6/ Corps/ Army/ Iraq)
– we had CCA authority, which was authority that would take five years would take 9 months. Okay?	9 Months	8	O-6	28	Engineer	Corps	Army	Iraq	9 Months (O-6/ Corps/ Army/ Iraq)

Table 12: Analysis of Question 7

Question 8

"Do you have any solutions you would recommend regarding contingency construction?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR
, the Chief of Staff, the Air Force Civil Engineer – when folks would come into Bagram, we were very consistent in our message that....the MILCON funding limitations a... need to be doubled at least in today's environment. Afghanistan is at the end of the world's longest supply chain. And to have notions that we can build under those parameters for those kinds of costs is just – it's not reality in today. It needs to be something different for AOR.	Increase MILCON limit in AOR	1	O-6	24	Support Officer	Group	USAF	Afghanistan
They said that there are authorities to deviate or to go beyond 750,000, you just have to exercise them. And one thing we're looking at doing this year, although it has not been approved, but it could be, is reprogram some money. And there's a formal reprogramming process in which you can take MILCON funds, or dollars, and you can reprogram them into other accounts. One account is the P341 account.	Reprogramming MILCON funds	6	O-4	11	Civil Engineer	Pentagon	USAF	DC
quite frankly the MILCON levels has to go up in the contingency environment. that's gonna need some type of legislation that sets a different set of rules for the contingency operations.	Increase MILCON limit in AOR	2	O-5	19	Army Officer	Corps	Army	Afghanistan
– this is an issue that's going to have to be fixed from on high. It's got to be – Congress has got to be in the loop on this. They've got to understand	Communication with Congress	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq
maybe we can get CCA in a more expedited way.	Decrease time for CCA	3	O-4	12	Attorney	Embassy/ Corps	USAF	Afghanistan/ Iraq
number one is for emergency operations, they need to increase the MILCON threshold. That's probably the number one item that needs to be changed and it needs to be changed to a minimum of $5 million in my opinion.	Increase MILCON limit in AOR	4	O-6	34	Engineer	Corps	Army	Iraq

Table 13: Analysis of Question 8

Question 8 (Continued)
"Do you have any solutions you would recommend regarding contingency construction?"

Response	Remarks	ID	Rank	Yr.	Occupat	Level	Service	AOR
I'm not gonna say eliminate any of the hurdles that you gotta go through. It's gotta go to CENTCOM, I don't see any way around that. It's gotta go to ARCENT. They were always very good. It's gotta go to OSD, I got it, but perhaps they should give authority perhaps as one of	Secretary of Defense has the authority to grant approval and	4	O-6	34	Engineer	Corps	Army	Iraq
better synchronization between the corps of engineers and the MNCI C7 shop too. I don't know how to do that but I wouldn't think it would be too hard if you think about it a little bit. But all the times they had technical knowledge on these, yet we were not talking as much as we	Communication and cooperation between agencies	4	O-6	34	Engineer	Corps	Army	Iraq
All those reasons count against temporary construction. And maybe it's is it a definitional problem? Yes. I think if this were presented to Congress, and every Congressman that ever came through when we presented it to em and I presented it personally in most cases, it was to them it was a no-brainer. They go ah, this is obvious. But whenever they went back it was dead on arrival. It never, far as I'm concerned it fell on deaf ears	Definitional problem (temporary construction), congressman didn't follow up on issues	4	O-6	34	Engineer	Corps	Army	Iraq
"Well, should it be 750K times an area of cost factor?	MILCON limit w/ area cost factor	7	O-6	24	Civil Engineer	Group	USAF	Afghanistan
What we need is the regulation – the regulation needs to read one way in peace time, and another way in – there's gotta be a peace time regulation and a contingency regulation.It should be the same regulation, but with a little table. The table says, "This is what we do in this particular situation, and this is what we do in this other type of situation."	Contingency Regulations	8	O-6	28	Engineer	Corps	Army	Iraq
Congress needs to be made aware of the impacts of the law. I don't know if they are.	Communication with Congress	4	O-6	34	Engineer	Corps	Army	Iraq

Table 14: Analysis of Question 8 (Continued)

Question 8 (Continued)
"Do you have any solutions you would recommend regarding contingency construction?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
the CCA process itself, I think the best methodology is to having the right people on the ground theater to be able to properly justify and work in within the system. Our technique of rotating people in and out simply puts us at a disadvantage because it's relearn process of return. consider select personnel doing 2-year tours and very – and I'm not talking these guys are not kicking in doors, these guys are working out of an office.And I'm talking for senior personnel	Get the right people involved in the process, continuity	4	O-6	34	Engineer	Corps	Army	Iraq	Get the right people involved in the process, continuity (34)
was a proposal was made by AFFSC. They said, "Look how about rather than having to go through this laborious approval process, why don't you delegate approval authority to us, or rather to CENTCOM or COCOM, to the Combatant Commander?"	Lower approval authority	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Delegate authority to COCOM, lower authority (Pentagon/ DC)
"Could the Resource Sponsors give up some of their resources to the COCOMs?" So the four-star level discussions about this, they were mostly held at Scott Air Force Base a few years ago.But the bottom line still remains, and this is a big hurdle to cross, is that the Resource Sponsors just don't want to give up control	Lower approval/funding authority	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Delegate authority to COCOM, lower authority (Pentagon/ DC)
you know, if your premise is to create – is to come up with some new alternatives, could one say that the Service component could advocate specifically for fixed funding specifically for the COCOM, in order to, say, execute a CCA program, if you were given that authority? I think that could happen. That could happen if you were to advocate through the given Service component that way. And that might be an alternative.So, in that case, then you delegate the authority to the Combatant Commander. You provide him with the ability to provide congressional notification himself, or herself, or their selves. And then they have fixed resources through the Service components in the way that they POM, and then he were able to reach out and cap those resources as needed.	Delegate the authority to the COCOM w/ congressional notification himself	6	O-4	11	Civil Engineer	Pentagon	USAF	DC	Delegate authority to COCOM, lower authority (Pentagon/ DC)

Table 15: Analysis of Question 8 (Continued)

Question 8 (Continued)
"Do you have any solutions you would recommend regarding contingency construction?"

Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR	Theme
the most dramatic proposal that came out of that Winchester Conference was that we see if we can delegate approval authority to the COCOM. A less dramatic suggestion was could we speed up our internal Air Force coord. on these packages.... **** would want me to advertise this, but it's absolutely true is that every Service has its own paradigms on how it does things. Some Services do some things one way, and some do the other. And there's nothing close hold or classified about what I'm about to tell you, but it is an Air Force issue.... we are the only Service that requires our congressional notification packages go from two different organizations to two different sets of committees. ... And it could do that, and, in fact, that's how they do it – that's how they operate on the Army's side of these things. Installation Environment function sends it out to all the committees and has less coordination responsibility, or it takes less time,	Delegate approval authority to the COCOM, reengineer the approval process	5	GS-13	20	Data Masked	Pentagon	Civil Service	DC	Delegate authority to COCOM, lower authority Pentagon/ DC)

Table 16: Analysis of Question 8 (Continued)

Emergent Concepts

Emergent Concepts - Response	Remarks	ID	Rank	Yr.	Occupat	Level	Service	AOR
Anytime, you know, when it comes to money like that, anytime you do it in house, you don't have to count the manpower against it, right? So if you did a contract, you would bump up against, and you would get less concrete for the money	Troop Labor	1	O-6	24	Support Officer	Group	USAF	Afghanistan
When I first arrived, Afghanistan was not the priority like it is now. And so we weren't getting type of CCA funding at all.	No CCA for Afghanistan	2	O-5	19	Army Officer	Corps	Army	Afghanistan
it's all political when it comes down – when comes right down to it because I'm sure you saw when you were in Iran – Iraq, there are a lot of projects that get a lot scrutiny from Congress because they show –they are indicators of long-term presence.	Political issues with "long term presence"	2	O-5	19	Army Officer	Corps	Army	Afghanistan
It cost about $10 million to build a barebones battalion-sized FOB with, ... So we tried to go through and get CCA through ARCENT and CENTCOM. Wouldn't do it, and so – because of the, you know, soreness of it that, you know, you're ******. So what happened is they came CENTCOM and ARCENT, mainly – ARCENT came back and said, "Well just divide it up, you know, you can split it up." Well the problem we ran into then is our lawyer – our fiscal lawyer, and our GE, our money guy, felt immediately that was project splitting ... And then we would go back, you know, I'm going to build the perimeter. I'm going to build this road. I'm going to build that road. And so we got into a legal Catch-22 where we could not get the lawyers to sign off and agree that it wasn't project splitting at that the multiple projects that were in fact, legal and sufficient. We messed around – there's literally, you know, it's like a three-star level were the lawyer at ARCENT had to write and opinion and they said we could do it, which Bagram. That was a very eye opening experience for me. the limitations of using CCA.	Upper level Command encouraging project splitting	2	O-5	19	Army Officer	Corps	Army	Afghanistan

Table 17: Emergent Concepts

Emergent Concepts - Response	Remarks	ID	Rank	Yr.	Occupat.	Level	Service	AOR
Our first one was not a fiscal lawyer and did not understand. And it was really, you know, the first that they'd ever worked at it. And so we – it was extremely painful trying to get project pushed through. Our second lawyer came in – was in fact a fiscal lawyer –and really, you know, he understand, "Okay, this is not legal, but this is what we can do to make it legal." So he would give suggestions. The first lawyer would say, "No, you can't do that." And then wouldn't give us any help on how to craft the projects folder.	Lawyers need to help by providing solutions	2	O-5	19	Army Officer	Corps	Army	Afghanistan
And then here's a quote that you can use. There was a – one of the Brigade Commanders, the ****** said – he said – I said "I can have an E5 call in over a million dollars worth of bombs and no one asks a question, but if I spend $750,000.01, then I am in trouble, and I can't build anything."	Problem with level of authority for CCA	2	O-5	19	Army Officer	Corps	Army	Afghanistan
there was a big division between those who – who were trying to get things done, you know, don't stop the mission, and those who wanted to do it right under the law.I was told, you know, "Marines are gonna die because you are stalling this process."	Two schools of thought: keep it legal vs. mission	3	O-4	12	Attorney	Embassy /Corps	USAF	Afghanistan/ Iraq
LOGCAP has completely overreached everything it was intended to do because it's easy. It's easy to contract somebody there. I went to all the LOGCAP meetings and, you know, they would just run through a variety of projects that were being requested and, "Yep we can support this," because they would have contractors of LOGCAP sitting right there, "Yeah we can do that." "We can do this." "We can do that." And there was no telling, you know, how much fraud waste and abuse that went on	LOGCAP waste and abuse	3	O-4	12	Attorney	Embassy /Corps	USAF	Afghanistan/ Iraq

Table 18: Emergent Concepts (Continued)

Emergent Concepts - Response	Remarks	ID	Rank	Yr.	Occupat	Level	Service	AOR
When we were getting down to the nuts and bolts of that building and saying, you know, we need more money under the MILCON to make this thing work, we were told by Secretary of the Army or Secretary of the Air Force, whoever it was that was, you know, providing us that money, "No we will not go back to Congress and ask for more money. You are stuck with $50 million," or however much it was.	Communication with Congress	3	O-4	12	Attorney	Embassy /Corps	USAF	Afghanistan/ Iraq
and I'm not even a contracts person. I – you know, I'm more of a litigation/military justice person. But it – the litigation – contract litigation wants as a litigator, but not as a contract specialist. So they saw that I'd done contract litigation, which I knew some, but not very much on, and they assumed that I must be an expert _____. And I was like, "Ah, this is crazy stuff."	Lawyers didn't have skills needed	3	O-4	12	Attorney	Embassy /Corps	USAF	Afghanistan/ Iraq
General Pertrarus to the Secretary of Defense I believe, bringing up the issue of funding and CCA and project/program issues. General Casey had done the same thing. His predecessor had also written about it	CCA is identified as a problem by top combatant commanders	4	O-6	34	Engineer	Corps	Army	Iraq
CCA is really designed to grant authority for projects for where we have no intent for long-term occupation of an area. Where in Afghanistan, that is in fact the plan and that's prohibited a lot of it in Afghanistan.	No CCA for Afghanistan	4	O-6	34	Engineer	Corps	Army	Iraq
And there were the questions that came back once you got to the OSD level were really – and the questions were frequently answered at CENTCOM level but sometimes they were passed down to us and they were quite frankly stupid questions in my opinion. A lot of – you could tell that it was people who were unfamiliar with – and I stay stupid, that's really misleading, they're uninformed questions. They were questions like why do you need this and yet there was a requirement of the submission is to explain the need. And they were questions you could clearly see that they did not have any level of fundamental understanding of a combat situation in Iraq. And you would have to answer those questions.	Need to improve CCA approval process, disconnected leadership outside theater	4	O-6	34	Engineer	Corps	Army	Iraq

Table 19: Emergent Concepts (Continued)

Emergent Concepts - Response	Remarks	ID	Rank	Yr.	Occupat	Level	Service	AOR
So the restrictiveness of the law does two things, one, in my opinion it goes against the intent of Congress to do it in a cheaper, faster mode. It actually does it in a slower and more expensive mode number one.Number two, CMU, and you know this, it's obviously a far better force protection measure than a CHU.	Law is not meeting its intent, Cost RLB vs. CMU, definitional problem	4	O-6	34	Engineer	Corps	Army	Iraq
We were told to stop doing it because of this authority. We were misreading it. We were calling these concrete missionary units temporary and they said that's not temporary. We were stretching the law I think at that time even though we did have JAG concurrence	definitional problem with temporary Construction	4	O-6	34	Engineer	Corps	Army	Iraq
I think part of that is because you have personnel rotating in and out and you don't have a long-term view and that happens. And quite frankly we don't – once these projects are built, we don't track em. We're not sending inspectors out three years later to say hey, did you do anything to this. And should we be doing that from a legal standpoint? Yes. But from a realistic war-fighter standpoint, no. And did not – we simply didn't have the personnel resources to do it. We didn't have the personnel resources to even inspect adequately as they were being built, which is a whole	Lack of personnel resources for proper inspection	4	O-6	34	Engineer	Corps	Army	Iraq
Again, I don't remember, I wanna say $500 million; I don't remember what it was. It's easy to bump up against that ceiling on CCA authority.	CCA appropriation is too low	4	O-6	34	Engineer	Corps	Army	Iraq
CCA if you take 6 to 9 months to get approved, now most of the requirement in that amount of time hasn't changed over time and that frequently occurred where you had an increase in the requirement in that window of time.You could not change the requirement once it was submitted	CCA is too slow and requirements change frequently during contingency operations	4	O-6	34	Engineer	Corps	Army	Iraq
Our technique of rotating people in and out simply puts us at a disadvantage because it's relearn process of return. consider select personnel doing 2-year tours and very – and I'm not talking these guys are not kicking in doors, these guys are working out of an office.And I'm talking for senior personnel	Continuity Problems	4	O-6	34	Engineer	Corps	Army	Iraq

Table 20: Emergent Concepts (Continued)

Emergent Concepts - Response	Remarks	ID	Rank	Yr	Occupation	Level	Service	AOR
. In July, we met with OSD Comptroller ourselves, and we had reps of SAF/FM there. AFFSC was there. CENTCOM was there. And this is in Winchester, Virginia, at Army Corps of Engineers – the Middle East District – Middle East District.And as ******** says, the premise of our meeting was to streamline, based on guidance from General Petraeus.So, upon his departure from MNF-I, General Petraeus sent the Deputy Under Security of Defense a memorandum that stated that he felt that even if CCA – some of the MILCON and CCA programs were still too cumbersome in order to meet the dynamic requirements of the war fighter in theater, given the fact that you're fighting an enemy who really doesn't care how long your political processes and your approval processes take to get something moved through the system and approved.	People are working to fix problem, Winchester, Virginia, General Petraeus sent the Deputy Under Security of Defense	6	O-4	11	Civil Engineer	Pentagon	USAF	DC
When I was there, there was no CCA going on.And I don't know if there was a moratorium on it, but there was no CCA going on, at least at Bagram. And if any CCA was going on, it would have had to have been done out of FOB.So, really, if it wasn't done with relocatable buildings, then it would have taken three to five years, a long, long time.Right.And that really wasn't an option to wait that long.Right, exactly.	No CCA for Afghanistan, lack of options	7	O-6	24	Civil Engineer	Group	USAF	Afghanistan
The more people you get writing on that, the more research on that, _____ hopefully we foster change in Congress, and even below.	Encouraging Change	8	O-6	28	Engineer	Corps	Army	Iraq
Sir, I think that's an interesting point that you brought up, and that is using troop labor as a means by which we can somewhat circumvent those funding thresholds because the labor is not counted against the construction cost. And as I understand it, and you please fill me in, 'cause I'm sure I'm not as familiar with it as you are, but it's my understanding that the Army got rid of a lot of their construction capabilities I think in the '90s, possibly. And part of that analysis involved saying that contractors can do everything that active duty military can do, or Reserves. But in fact, that might not be the case in a contingency environment, because contractors, all their labor costs go against the construction limit. But troop labor does not. So, it seems like that may not have been an accurate assessment back when they did that analysis.That is a true statement....because of that fact, the use of troops...should be the first – because of all the other restrictions because of contingency and military struction restrictions, ... to expedite those projects, and that may or may not affect the commander's flexibility in th	PBD 720 Consideration-Troop Labor and funding limits	8	O-6	28	Engineer	Corps	Army	Iraq
cca but I believe it was out of Kosovo, and the Army had come up with an opinion – in other words to use O&M funds to construct for immediate construction, for like bare base facilities in a contingency environment.	Origin of CCA-Kosovo	9	O-4	14	JAG	Joint Contracting Command	USAF	Afghanistan/ Iraq

Table 21: Emergent Concepts (Continued)

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14. ABSTRACT Top military leadership has identified problems with the timeliness and effectiveness of DoD contingency construction support. Qualitative data was in order to gain clarity on the problem space and lay a foundation for solution generation and selection. Interviews were conducted with agents with experience within the Iraq and Afghanistan theater of operation as well as support functions for the Pentagon. Commanders, Engineers, Lawyers, Acquisition Attorneys, Staff Officers and Program Managers have been interview. The interviews have been analyzed using open coding to answer research question and identify to emergent themes and concepts. The data collected has confirmed the hypothesis that the project programming regulatory structure is not meeting its intent, or the needs of our war fighters. Furthermore, because it is not meeting the war fighter's need the system is being manipulated in order to, "accomplish the mission" which is creating unintended consequences with regard to cost, health, safety, force protection, ADA violations, mission support and safety. Significant negative consequences were found to be attributed to the interpretation of "temporary construction" and the time required to process CCA projects. Additionally, a value stream map was created in order to map the contingency construction approval and funding process. This research effort has provided clarity of the problem space of contingency construction and prepared a foundation for future research to address the problem.

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